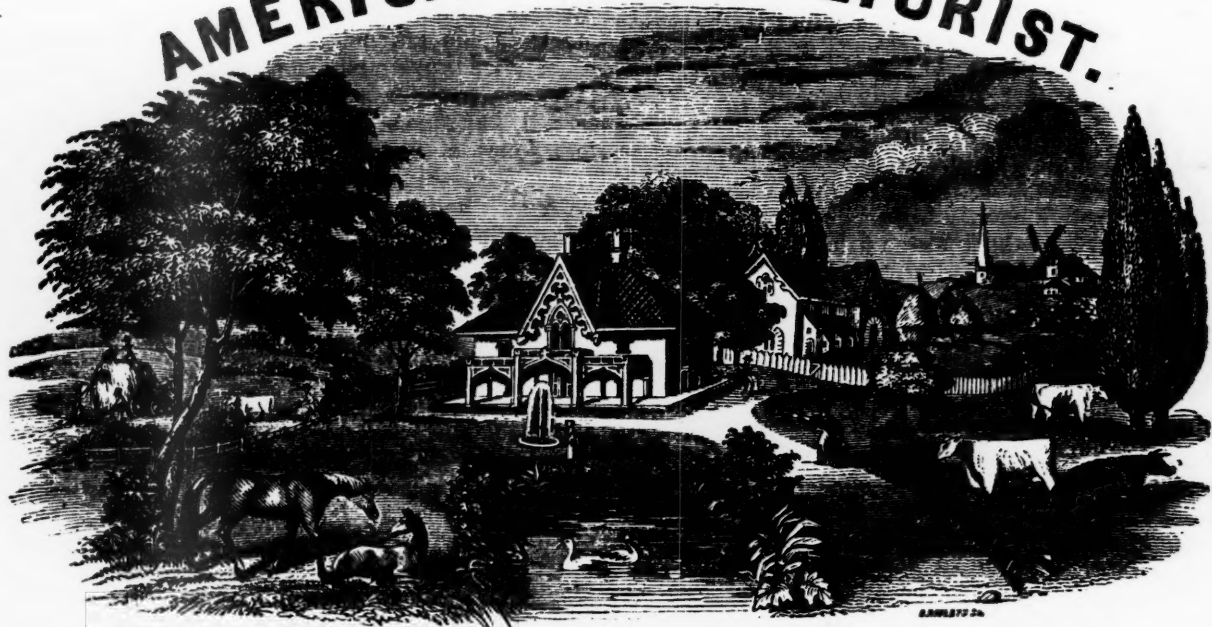


AMERICAN AGRICULTURIST.



Agriculture is the most healthful, the most useful, and the most noble employment of man.—WASHINGTON.

VOL. V.

NEW YORK, NOVEMBER, 1846.

NO. XI.

A. B. ALLEN, Editor.

SAXTON & MILES, Publishers, 205 Broadway.

TO EXCHANGE PAPERS.

Please to take Notice.—Ever since we have conducted this journal, we have exchanged freely with all respectable papers desiring it, and shall be happy to continue to do so, wherever we are fairly dealt by. We regret, however, to say, that in several instances this is not the case, and that a few papers are in the habit of making up their agricultural department almost entirely from ours, without giving the least credit whatever, and some of them have the unblushing impudence to put such matter in leaded type, under the editorial head. We have frequently, privately and otherwise, remonstrated against this injustice—but to no effect; we now give such papers warning, that if they continue to quote from us without credit, we shall stop the exchange. Another class of exchanges when they copy from us, merely add at foot, “Am. Ag.” We think they ought to give the title of this journal in full, or nearly so—*Amer. Agriculturist*. A few other papers are in the habit of reprinting our periodical almost entirely, as fast as it appears. We can only say to such, that this journal costs us a good deal of hard labor to edit it, and several thousand dollars a year money paid out to printers and paper-makers, and the course they are thus pursuing is injurious to our interests. We therefore add, that while it gives us pleasure to see occasional articles copied from our periodical, we must object to so faithful a reprint, and warn those doing it, if they persist, we shall be under the necessity hereafter of copyrighting every number of the *Agriculturist* as fast as it appears.

FRUIT-TREES FOR THE SOUTH.—Persons living South where they will require fruit-trees from the North, to be planted out in January or February, are reminded that it is important to make their

orders before the ground closes, as they cannot afterwards be conveniently taken up.

AGRICULTURAL WAREHOUSE IN NEW ORLEANS.

MR. R. L. ALLEN, whose name is familiar to the readers of the *Agriculturist*, will leave here early during the present month, for the purpose of establishing an Agricultural Warehouse in New Orleans. Such an enterprise seems to be demanded, if we can judge correctly from the numerous solicitations we have received on this subject from our Southern friends. They can order their general supplies of staple agricultural implements from us here, without material inconvenience; but to fill up their intermediate and occasional demands, and especially in supplying themselves with new and recently improved implements, &c., they need an establishment nearer home. To accommodate this demand is the object of the proposed undertaking, which, we doubt not, will be fully sustained by our friends and the enterprising planters generally at the South.

Mr. Allen will travel through the Atlantic and Gulf states, and both in New Orleans and on his route, will receive orders for Messrs. Ruggles, Nourse & Mason, of Boston and Worcester, Mass., and for our agricultural establishment, 187 Water Street, New York; and also receive subscriptions and establish agents for the *American Agriculturist*, of which he will be a regular correspondent from the South. All letters or orders may be addressed to him to our care, till the 15th of this month, after that, to New Orleans. We commend him to the attention of our friends, and anything they may do to further the objects of his tour, and establishment at New Orleans, will be gratefully reciprocated by us in this city.

AMERICAN AGRICULTURAL ASSOCIATION.

THIS Society held their first meeting for the season at the Historical Society's Rooms, at the New York University, on the 7th of last month. The session was chiefly occupied in framing a code of by-laws under their late act of incorporation, which were adopted and ordered to be embodied with the list of members in the first number of the Transactions of the Association shortly to be published. The next meeting will be held at the usual place, on Wednesday, the 4th inst., at 7 o'clock in the evening.

NINETEENTH ANNUAL SHOW AND FAIR OF THE AMERICAN INSTITUTE.

THIS commenced on the 5th of last month, and continued till the 23d. A few weeks preceding, all the buildings at Niblo's Garden, where the show is usually held, took fire and burned to the ground. This at first seemed a heavy calamity to the Institute, as it was supposed they would be unable to find accommodation in the city for their show. But fortunately for the Society, they at length secured Castle Garden, on the Battery, which proves far superior to all places, in its accommodations, heretofore occupied for their fairs. Indeed, if the building had been erected expressly for the purpose, it could not have been better suited. The bridge, 230 feet in length, leading from the Battery to the Castle, was roofed over, and devoted to agricultural implements, carriages, heavy machinery, &c. The Castle is about 200 ft. in diameter. The area was occupied with woollen and cotton fabrics, leather fabrics, cutlery, glass and earthenware, jewelry, and other fancy articles; the steam engine, and some heavy machinery operated by it, were arranged on the outward circle; while the galleries all around were adorned with paintings, Daguerreotypes, fancy work, and the horticultural display of flowers, fruits, and vegetables. The *coup d'œil* was magnificent, and the whole arrangement gave great satisfaction. The number of visitors instead of being less, as was apprehended in consequence of holding the fair at this extreme end of the city, proved much greater than ever. Not less than 200,000 are supposed to have been admitted during the exhibition.

As we are bound every year to record the show of the Institute, we mention such things only as are particularly new to us in an agricultural point of view. In the way of plows we find nothing more to notice, than the recently invented dial clevis of Ruggles, Nourse & Mason, which enables the plowman to gauge his implement to a quarter of an inch, if he wishes to be so exact, and adjust the plow also to run close alongside of a fence, or ditch, or keep the off horse on the hard surface when plowing wet lands, instead of being obliged to walk in the open, miry furrow, so very hard and wearisome to him. Their self-sharpening plow also, with the application of the centre draft, is a great improvement. The points in these are of cast steel, and wear and keep sharp for years. A curious plow for cutting up the roots of newly cleared land, we think very highly of. It will easily cut off roots three inches in diameter, as it moves through the ground. A new hand corn-

mill, far superior to Swift's late invention, was exhibited. Mr. Fitzgerald has made some improvements in his burr-mill. We also noticed several other good implements, among which we mention Gaylord's concave and convex hay and straw-cutter; B. Langdon's corn-stalk, hay and straw cutter; Jones & Smith's seed and plaster-sower; E. Luken's washing machine, efficient and easily worked. In the way of harnesses we noticed a new horse-collar, which, instead of being separate, consisted of only one piece. This is particularly well calculated for Southern use, among careless negroes. It is rarely out of repair, and the hame-string never gets lost, for, in this collar, there is none to lose.

The horticultural exhibition was not quite so good as usual. Several fine specimens of dew and water-rotted hemp, from Hon. Henry Clay and others; splendid ears of corn, of various kinds, some on stalks 15 feet high; large beets; mammoth pumpkins from A. Miller, Newburgh, A. Silkworth, Staten Island, and others; bell-neck pumpkins from J. B. Colyer, L. Island, and Pelham farm; magnificent golden crook-neck squash, from R. L. Pell; four immense striped squashes, from Mr. Beekman, also, large yellow, sweet potatoes, &c, &c.

The plowing and spading matches came off on the 9th of October, at Flushing, and were similar in their character to those the Institute has got up, with one exception, for the last eighteen years. We consider them a complete farce, and unattended with the slightest improvement whatever. Nor do they establish a single important principle.

The cattle show came off on the 14th and 15th of October, and on the whole was a prime one. There were a large number of first rate working cattle exhibited, principally from Connecticut; some good Durhams; a beautiful display of Devons, by Mr. Colt, of Patterson, and choice Ayshires and Alderneys. Mr. Bathgate showed a very fine cow, and a great milker, a cross between the Durham and Ayshire. The genuine natives were fewer than ever, being rather shy to stand up alongside of the improved breeds. One most superb fat ox was exhibited. He was bred by Mr. Le Roy, of Livingston County, and fed and shown by Mr. Olyphant. He is a cross of the Dutch and Durham. He weighs a trifle over 2,700 lbs. He carried a superb brisket, and in other points was quite superior. The match horses were superb, and in considerable force. As for sheep, the show was rather slim. A curious-looking animal was on the ground, a cross between the Merino and long-wool. His fleece was 5 or 6 years old, and along the sides measured 22 inches in length. It was most extraordinary. The swine were a good show. One famous porker present weighed 1,080 lbs., and some of his progeny there bid fair to rival him in dimensions. If any one wants big hogs, now let them speak. They can have choice pigs for \$25 to \$30 per pair.

Lectures, speeches, music, fire-works, and other entertainments followed each other in regular succession, nearly every evening during the fair, and on the whole the thing passed off with increased *éclat*.

NATIONAL CONVENTION OF FARMERS, GARDENERS, AND SILK-CULTURISTS.

THIS branch of the American Institute held its first meeting, agreeably to the announcement in our last number, at Mechanics' Hall, on Monday, the 12th of last month, and continued in session until the Friday following. General H. A. S. Dearborn, of Massachusetts, was chosen President; John Ogden, of New Jersey, and A. P. Byram, of Kentucky, Vice Presidents; and D. J. Browne, of New York, and Thompson C. Munn, of New Jersey, Secretaries.

The Convention was opened by an eloquent address by the President, setting forth the advantages of agriculture, and its kindred pursuits, with many interesting facts connected with science, and the benefits derived from our agricultural institutions. The principal topics for discussion during the session were as follows:—

Washington's Department of Agriculture.—Mr. Meigs moved that a committee of thirteen be appointed for the purpose of taking into consideration the establishment of "Washington's Agricultural Department of Government," and the following gentlemen were chosen:—Henry Meigs, of New York; A. P. Byram, of Brandenburg, Ky.; Moses B. Coe, of Newark, N. J.; Martin Ellsworth, of Windsor, Ct.; Judge Tiffany, of Montgomery Co., N. Y.; James Darrach, of Orange Co., N. Y.; William J. Gilchrist, of Saratoga Co. N. Y.; Peter H. Brink, of Saugerties, N. Y.; Jacob D. Van Winkle, of Hudson Co., N. Y.; Jenison G. Ward, of Fulton Co., N. Y.; Dr. L. A. Smith, of Essex Co., N. J.; Gen. H. A. S. Dearborn, of Roxbury, Mass.; and Dr. R. T. Underhill, of New York.

Mr. Meigs, Chairman of said Committee, subsequently presented a Report, accompanied by a Circular addressed to County Agricultural Societies, urging them to memorialize Congress to establish such a Department. The last words of WASHINGTON on this subject were as follows:—

"It will not be doubted that, with reference either to individual or national welfare, agriculture is of primary importance. In proportion as nations advance in population and other circumstances of maturity, this truth becomes more apparent, and renders the cultivation of the soil more and more an object of public patronage. Institutions for promoting it grow up, supported by the public purse; and to what object can it be dedicated with greater propriety? Among the means which have been employed to this end none have been attended with greater success than the establishments of boards, composed of proper characters, charged with collecting and diffusing information, and enabled by premiums and small pecuniary aids to encourage and assist a spirit of discovery and improvement. This species of establishment contributes doubly to the increase of improvement, by stimulating to enterprise and experiment, and by drawing to a common centre the results, everywhere, of individual skill and observation, and spreading them thence over the whole nation."

Experimental Garden in Florida.—Mr. Samuel B. Parsons offered a Resolution on the "Expediency of establishing an Experimental Garden in

Florida for the Acclimatization of Foreign Trees and Plants," which was referred to a committee consisting of the following persons:—General H. A. S. Dearborn, of Massachusetts; Samuel B. Parsons, and Dr. William W. Valk, of Flushing, L. I.; Rev. R. Randolph Gurley, of Washington, D. C.; and Robert L. Pell, of New York.

General Dearborn, in behalf of said Committee, read a very able report, pointing out the immense advantages which may accrue to the whole Union, from the introduction and culture of the plants of the tropics and of the temperate zones, not indigenous to the United States, that may be rendered subservient to the interests of the mechanical and manufacturing industry of the country. It was contended that the establishment of such a garden would increase the variety and value of our exports, as well as afford aliment, and augment the number of species of fruit, forest, and ornamental trees or shrubs, and herbaceous plants.

The favorable disposition of Congress to found a Botanic Garden in Florida, has been emphatically illustrated, by the liberal grant of a large tract of land to Doctor Perine, several years since; but that intelligent, adventurous, and zealous naturalist, having been unfortunately slain by the savages, during the Seminole war, just as he had commenced the transplantation of numerous tropical plants, which he had procured in Central America and Mexico, the great object of the government, in affording assistance to that patriotic man, was, thus, suddenly frustrated; but it is to be confidently presumed, that an equally liberal patronage will be again extended, and in such an efficient manner, as to render the realization of the important projects, for the acclimatization of foreign plants, as certain as it is desirable. The Report ended in recommending the following resolutions, which were adopted:—

Resolved, That the American Institute be requested to memorialize Congress, to adopt such measures, as may be deemed most expedient, for the establishment of an *Experimental Botanical Garden, in Florida, for the Acclimatization of Tropical and other Foreign Trees and Plants*, and for the distribution among the several States, in such a manner as will best subserve the interests of each.

Resolved, That the American Institute be also requested to correspond with the Agricultural, Horticultural, and Botanical Societies, throughout the United States, on this subject, and ask their generous co-operation, by transmitting memorials to Congress, of a like import to that, designated in the foregoing resolution.

General Mercer, on invitation from the chair, rose, and said he cheerfully responded to the request made on the part of the Convention, and proceeded to state that he had resided and travelled six years in Florida, and could speak with experience on the soil, climate, and capabilities of that country. It has a soil, he said, varying from the lightest sand of the most sterile kind, to the richest alluvial; and from its evergreen forests, which change but little in their temperature, from summer to winter, and the Gulf stream that runs by, hugging, as it were, almost its entire coast, its climate is less variable than that of any other portion of the United States. The orange and the delicate lemon are

seldom injured by the frost. The olive and the soft-shelled almond arrive at perfection there, but the apple, the pear, and the Spanish chestnut not, on account of the continued heat. He considered that the project of an experimental garden in Florida, was practicable, and would be attended with beneficial results—that trees and plants of the choicest, and of the most useful kinds, could gradually be acclimated there, from every region of the globe. But as to receiving aid from government, he thought that in the present temper of Congress, nothing of the kind could be hoped for—yet they might be disposed to grant a tract of land. It was his belief that the project could be carried into effect by private enterprise, and for one he was willing to contribute to its support. The sum necessary to commence operations, he said, need not exceed \$1,000 per annum.

Supposed Effects of the Gases of Brick-kilns on Vegetation.—Dr. Underhill described what he conceived to be the “Noxious Effects of the Gases of Brick-kilns on Fruits and Vegetation,” which led to the appointment of a committee to report on the nature of said effects, if they exist, and to institute inquiries as to a remedy, &c., whereupon the following were chosen:—Martin Ellsworth, of Connecticut; Dr. R. T. Underhill, Professor James Renwick, and Dr. J. R. Chilton, of New York; Peter H. Brink, of Saugerties, N. Y.; James Darrach, of Orange Co., N. Y.; and Stephen Haight.

Progress of Silk-Culture in the United States.—General Dearborn suggested the expediency of appointing a committee to report on the “Culture of Silk” in this country, which was adopted, and the following gentlemen were chosen:—A. C. Van Epps, of New York; J. B. Hyde, of Long Island; J. M. Summy, of Lancaster, Pa.; and H. P. Byram, of Kentucky.

Mr. Van Epps, Chairman of said committee, read a report on this subject, stating that it is a matter of regret that a branch of industry so evidently and intimately connected with our interests as a nation, and which, at the same time, has been so fully tested in every latitude of our country, should advance so slowly, and elicit the energies of so few of our people. The committee go on further to state, emphatically, that they believe no other country or people are so well calculated to perfect the whole silk business, as our own, and that the chief obstacles are altogether artificial. They intimate that unwise legislation on the part of the general government, and the want of suitable encouragement from State authorities, are the chief reasons why this branch of industry has never been more extensively prosecuted. In accordance with these views, they begged leave to adopt the following Resolutions:—

Resolved, That we recommend the careful preservation and cultivation of the Mulberry Trees now among us, and to increase them to a sufficient extent to supply a constantly increasing demand; and that we urge upon every farmer the planting of at least one acre of trees, from the foliage of which one or more crops of worms may annually be fed, without interfering with the ordinary pursuits of the farm.

Resolved, That we view the change recently

made by Congress in the duties on imported silks, as altogether misjudged, and calculated directly to throw additional embarrassments in our way which we are altogether unprepared to surmount; and that unless a more judicious policy be adopted by the next Congress, the business generally must be immeasurably retarded, and in some of its branches utterly destroyed.

Resolved, That we consider the practice of family reeling productive of irregular and imperfect raw silk, and thus greatly interfering with the after uses to which such silks may be devoted. Hence, we recommend the establishment of a regular filature system, furnishing a cash market for all the cocoons produced, as the only effectual remedy for this evil, and intimately and inseparably connected with the ultimate success of the enterprise.

Resolved, That we most earnestly urge upon the approaching Congress the importance of so correcting the duties upon both raw and manufactured silks, as to give such protection for us as to place us beyond the possibility of injury from foreign competition.

Resolved, That the establishment by Congress of a national Filature Nursery Plantation and Cocoonery, in or near the District of Columbia, under the superintendence of a competent and experienced person, where individuals can obtain all the information necessary for prosecuting the reeling of silk, the cultivation of the mulberry-tree, and the successful nurture of the silk-worm, would be a measure of the utmost importance to every section of the Union, and calculated to advance the enterprise more than any other single instrumentality can do.

Resolved, That we believe it the duty of the Legislatures of the several States, each to offer immediately a liberal bounty for the production of cocoons, and that we regret that the State of New York should have refused, in opposition to the memorials of a considerable portion of the people, to renew a bounty which has been fostering the business for six years past.

Resolved, That we recommend to State and County Agricultural Colleges and Institutes, the importance of connecting with their operations a department for the culture of silk, under the direction of those qualified to give instructions on this branch of industry.

Culture of the Grape.—It was moved by Dr. Underhill that a committee of three be appointed to report on the “Culture of the Native Grape in Vineyards for Wine, and for the Table,” which was adopted, and Dr. R. T. Underhill, Charles Henry Hall, and Henry Meigs, of New York, were chosen.

Dr. Underhill, as chairman of said Committee, offered a report in which was embodied the following resolution:—*Resolved*, That the culture of the Native Grape is a subject of primary importance, and that it be recommended to all the agricultural associations in the Union to make experiments with the different kinds growing in their vicinity, in order to ascertain their properties, to test their qualities, procure seedlings from them, and by high cultivation to secure such varieties as will lay the foundation for successful culture.

Mr. Charles Henry Hall said that he could not concur in the opinion expressed in the report of Dr. Underhill that the foreign grape is totally unsuited to the climate of the United States; for, it was his belief that, with proper culture, in chosen localities, it could be brought to perfection. He could not speak positively, however, on this point, but expressed a desire that the Chairman should give what information he possessed in relation to the subject, upon which General Dearborn rose and said that, in early life, he attempted to cultivate the European grape in the open air, in Massachusetts, by high manuring, pruning, smoking, &c., but could not succeed in obtaining good fruit. He stated that, when his father was Minister, near Lisbon, he caused a selection of some cuttings of the choicest varieties of grapes to be made there, by an experienced vine-dresser, with minute directions for their culture and management, which were sent home and planted in his garden near Boston, and after nurturing them with seven years' excessive care, no grapes were produced, and at last he dug them up and threw them away. From personal observation, and long intercourse with persons from different parts of the Union, he unequivocally expressed it as his opinion that the foreign grape will not thrive in this country in the open air.

Adjournment.—Mr. Robert Lawrence of New York, moved that this Convention be adjourned to the next Annual Fair of the American Institute, at such time and place as the managers may designate, which was adopted.

SHOW OF THE QUEENS COUNTY AGRICULTURAL SOCIETY.

THIS was held on the 9th of last month, at Flushing, and certainly was one of the most agreeable meetings we ever attended. It was made the more attractive by the plowing and spading matches of the American Institute, being arranged to come off at the same time, near the show-ground. A delightful hour's sail up the East River into Flushing Bay, brought us to the town, where we found thousands of ladies and gentlemen already assembled there, and enjoying the festivities of the occasion.

The show-ground was located in the heart of the village, near the Friends' Meeting House, and was ample and commodious. It was well fenced in, and all around the different kinds of stock were arranged, and showed to great advantage. In the centre of the ground a magnificent tent of 80 to 100 feet diameter was pitched, and within this was arranged a great variety of the flowers, fruits, vegetables, and seeds, of the season. In the centre of the tent stood the Temple of Flora. This was really one of the most beautiful and tastefully executed things we ever saw. It was the handiwork of the fair ladies of Flushing, and did them great credit. Thousands of choice flowers were culled to adorn the Temple, principally from the gardens of Messrs. Winter & Co. But Flushing is a town of flowers, and many of the private gardens contributed to form the Temple, and the pretty pyramids and bouquets which surrounded it. We doubt whether this show of flowers has ever been excelled in the United States. The dahlias particularly were very abundant and perfect. Of the fruits, Messrs. Prince & Co. made the largest display.

Mr. Wm. H. Schermerhorn contributed a plate of new seedling peaches, very large and fine. They much resembled the Late Crawford, but are less elongated in shape. He has given them the name of the *Rose Hill*, from his residence, where they originated. We are not much of a connoisseur in domestic fabrics, but could not help noticing a curious counterpane, made by Mrs. Jesse Brown, of 6,722 pieces! and a beautiful knit bed-spread, by the ingenious Mrs. Jander. Other curiosities there were in abundance, but we have not space to mention them. Among the stock present we counted 37 yoke of superb working oxen, made up, we believe, from the town of Flushing alone. This was just the same number as was exhibited in Auburn, at the late State Show, and they would compare favorably with them in appearance. The other animals present were respectable. Perhaps the most attractive after the big team, were a pair of beautiful Shetland ponies in harness, about the size of stout Newfoundland dogs.

Upon the whole the Queens County Show went off well. It was attended by several thousands of both sexes, and seemed to give general satisfaction. This Society is one of the most spirited and flourishing in the State. We are under obligations to its gentlemanly officers for their polite attention to us while on the ground, and close our brief notice, by wishing them well through their arduous duties, and as good a show next year.

THE PROPER TIME FOR CUTTING TIMBER.

NINE-TENTHS of the community think winter the time for this purpose, but the reason assigned, "that the sap is then in the roots," shows its futility, as it is evident to the most superficial observer that there is nearly the same quantity of sap in the tree at all seasons. It is less active in winter, and like all other moisture, is congealed during the coldest weather; yet when not absolutely frozen, circulation is never entirely stopped in the living tree. Reason or philosophy would seem to indicate that the period of the maturity of the leaf, or from the last of June to the first of November, is the season for cutting timber in its perfection. Certain it is, that we have numerous examples of timber cut within this period, which has exhibited a durability twice or three times as great as that cut in winter, when placed under precisely the same circumstances. After it is felled, it should at once be peeled, drawn from the woods, and elevated from the ground to facilitate drying; and if it is intended to be used under cover, the sooner it is put there the better. Wood designed for fuel, will spend much better when cut as above mentioned and immediately housed, but as this is generally inconvenient from the labor of the farm being then required for the harvesting of the crops, it may be more economical to cut it whenever there is most leisure.—*Allen's American Agriculture.*

TRAVELLING AGENCY.—Mr. J. Vanderbilt, Jr., is now travelling in the Southern States, as agent for our Agricultural Warehouse in this city; also for the American Agriculturist. All moneys paid to him on our account we guarantee shall be properly applied, and all orders given through him will be faithfully and promptly executed by us.

THE ALPACA.—No. 6.

Introduction of the Alpaca into Europe.—The greatest number of llamas that were ever carried to Europe at one time, was a herd that arrived at Cadiz, in 1808. It originally consisted of thirty-six individuals, including the sorts called llamas, alpacas, and vicuñas. They were brought from Lima, in Peru, and Concepcion, in Chili, to Buenos Ayres, by slow journeys of two or three leagues. They were fed on the road with potatoes, maize, and hay; but when their supply of potatoes was exhausted they became so constipated, that it was necessary to afford them medical relief. Eleven only of the number arrived at Cadiz, of which two died there. These animals were carried to Europe as a present from Godoy (Prince of Peace), to the Empress Josephine; but they arrived just at the period of his disgrace, at the commencement of the Spanish Revolution; and the populace, in hatred of their late minister, were about to throw the llamas into the sea. The governor of Cadiz, however, rescued them; and they were given in charge to an eminent Spaniard, Don Francisco de Theran, who had a fine zoological garden at San Lucar de Barrameda, in Andalusia. The French armies having subsequently traversed this province, Marshal Soult took the llamas under his care; and Monsieur Bory de Saint Vincent, a distinguished French naturalist, who accompanied the army, studied their habits with great attention, and made some drawings of them, which were afterwards lost at the battle of Vittoria. He paid particular attention to the quality of their wool, and transmitted some specimens of each sort to the Academy of Sciences, at Paris. It appears from the report of M. de Saint Vincent and Don Francisco de Theran, that the fleece of the *alpa-vigonia* (the cross between the vicuña and the alpaca) is much longer and six times heavier, than that of any other variety.

The first account of this interesting race of quadrupeds as having been introduced into Britain, was that of the beautiful white and brown female alpaca exhibited by Mr. Cross, in the Surrey Zoological Gardens, from 1810 to 1816, and is noticed and figured in page 217 of the present volume. In a letter to Mr. Walton, dated May 2d, 1843, Mr. Cross gives the result of his experience in regard to this animal in the following words:—

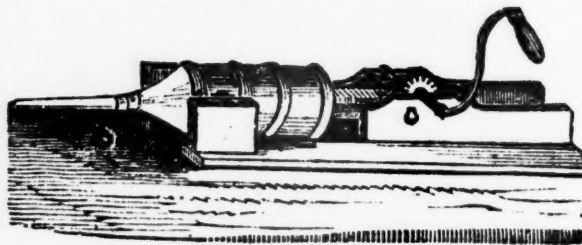
“As you are desirous of having the result of my observations relative to the alpacas which have fallen under my notice, I beg to say that the first one brought to this country came into my possession after being for two years in that of Mr. De Tastet, of Halshead, in Essex, who exchanged it with — Tharpe, Esq., of Chippenham Park, near Newmarket, for a pair of magnificent coach-horses. The latter gentleman kept it for about two years, in the hope that one might arrive from Peru of a different sex, as he was anxious to breed from them in consequence of the fineness of their wool. Disappointed in his object, I bought it of him for one hundred guineas, and exhibited it about six years; consequently it must have been eleven or twelve years old when it died.

“It was fonder of browsing than grazing. One remarkable fact I cannot help mentioning, and that is, that it never drank anything during the whole

time I had it, though repeatedly offered drink. I fed it upon bran, oats, carrots, and hay; occasionally in the season with a little green tares. Its wool was about eighteen inches long, mixed with some trifling portions of hair. It was remarkably tame, and I may say affectionate. I have since had several others of various colors, some quite black, and others piebald, &c. Having had them so often, I let them take their chance in the stalls, giving them the opportunity of running into a paddock, and they always did well. The last pair I had were perfectly black, and I sold them to Mr. Advellant, who immediately took them over to the King of Bavaria. The late King of Wirtemberg, and other continental monarchs, also had some of me. I think they might be introduced into some parts of this country with great advantage, particularly in the hilly parts of Scotland and Ireland, where they could have an opportunity of browsing as well as grazing. Occasionally they will breed with the llama; and a more elegant animal than the offspring cannot be imagined, but whether the latter will breed again, I cannot say.”

About the time Mr. Cross was exhibiting his interesting specimen, the late Duchess of York had four or five llama and alpaca pets at Oatlands, where she took great delight in watching their sportive antics on the lawn, or contemplating their intelligent and expressive countenances, greatly resembling that of the gazelle. They ran the chance of all exotics, whether animal or vegetable; left to the care of servants who, when the master and the mistress are away, usually treat them as mere matters of course, and often with a strong feeling of prejudice. When the Duchess died, these pets necessarily were dispersed; and, in all probability, at that early period breeding with them was deemed an impracticability. They, however, lived long enough at Oatlands to render it apparent that they are of a hardy race, although the old and plain-spoken park-keeper has more than once been heard to say, that, while under his charge, they were not in their proper element, the grass being too *firm*—meaning too rich and good.

SAUSAGE STUFFER.



SAUSAGE STUFFER.—FIG. 78.

THIS ingenious contrivance will save the labor of eight or ten persons in filling sausages, and the work is performed with the greatest facility, and in the most perfect manner. To those who have only a few sausages to make, this machine is certainly worthy of attention. Price \$4.50 to \$5.

Do not forget to arrange your fall and winter's work so as to send your boys to school. Be kind to your flocks, and remember the poor.

BRITISH AND IRISH FLAX CULTURE.—No. 1.

History.—The cultivation of flax has engaged the attention of mankind from the earliest ages, in almost every part of the globe; and has continued, to the present time, a source of profit to the cultivator, and of employment to the people. Several lively allusions occur in the Sacred Scriptures. "The flax and the barley was smitten; for the barley was in the ear, and the flax was balled. But the wheat and the rye were not smitten, for they were not grown up." From this simple statement we discover the accuracy of the Mosaic account, for in England also flax ripens before wheat. Rahab hid the spies with the stalks of flax that were laid in order on the roof of her house. Now as a nice regard is paid to the order in which flax is laid to dry at the present time preparatory to scutching and spinning, doubtless hers was placed upon the roof for similar purposes. Many cottiers in Ireland grow small patches of flax in their gardens, which they prepare and spin for their own private uses.

Solomon had horses brought out of Egypt, and linen yarn; the king's merchants received the linen yarn at a price. Job complained that his days were swifter than a weaver's shuttle. From these quotations we learn that flax was cultivated, prepared, spun into yarn, woven into linen, and considered an important article of merchandize in those remote ages. Indeed, fine linen is frequently mentioned amongst the ornaments of the Temple at Jerusalem. "The Egyptians," says Belzoni, "were certainly well acquainted with linen manufactures equal to our own, for in many of their figures we observe their garments quite transparent, and among the foldings of the mummies he observed some cloth quite as fine as our common muslin, very strong, and of an even texture," which proves that their manufactures must have arrived at a great degree of excellence. Pliny describes the different qualities of flax respectively produced by each country, with a particularity which argues that the manufacture of linen was already become an important branch of commerce to many nations.

Flax was first introduced into England by the Romans. In 1175 it was classed amongst all titheable productions. In 1531 a statute was enacted, requiring that, under certain penalties, "for every sixty acres of land fit for tillage, one rood should be sown with flax and hemp-seed." From that period to 1767 many unsuccessful attempts were made to extend and improve the cultivation and preparation of flax. In the latter year several thousand pounds were proposed to be divided amongst the successful cultivators of the plant. About the year 1798 a bounty of 4*d.* per stone was given to claimants for the growth of flax. "In 1810 a new method of dressing flax was proposed by Mr. Lee, who not only patented the invention, but obtained an act of Parliament by which the specification of his invention was ordered to be deposited in the Court of Chancery, to be kept secret from the public for 15 months, and then to be produced only by order of the Lord Chancellor, and by him to be examined whenever occasion required. . . . Messrs. Hill and Bundy, in the year 1817, likewise patented an ingenious machine for breaking and rubbing flax; but though this was said to have considerable

merit as regarded its mechanical arrangement, the machine has not been found of greater practical utility than that of Mr. Lee." But this branch of national industry may not be said to have been thoroughly established before the formation of the Norfolk Flax Society, the first annual meeting of which was held on the 6th of January, 1843. The objects of this association are—

Firstly.—By a partial alteration of the rotation of crops to increase the annual profits of the cultivators of the soil.

Secondly.—By the introduction of flax, the culture of which affords considerable employment to women and children, to add to the scanty earnings of the agricultural laborer.

The third object we have in view is to open a new source of employment for the manufacturers of the city of Norwich, and thus to relieve the distress so prevalent among the industriously-disposed poor of that ancient city.

On the 3d of November, 1843, a National Flax and Agricultural Improvement Association was also formed at Ipswich, for the purpose of affording instruction and assistance in the cultivation of flax, the use of the seed to fatten cattle, box-feeding, summer-grazing, &c., &c.; on which occasion many specimens of flax and linseed of superior quality were exhibited from various counties, proving that the soil and climate of Great Britain and Ireland are peculiarly adapted to the culture of the plant.

From a series of experiments made during the past four years, and now in extensive operation, particularly in Norfolk, it has been incontestably proved that a compound of flax-seed, with grain, pulse, or chaff, for fattening cattle, is far superior to foreign oil-cake; and if used in connection with box-feeding and summer-grazing, will enable every farmer in Great Britain to fatten more than double his usual number of stock, and render him forever independent of foreign aid, both for food for his cattle and manure for his land. Hence it will readily be seen that a more abundant supply of grain, meat, wool, leather, tallow, oil, flax, and hemp, &c., &c., must be produced, and the merchant, the tradesman, the artisan, and the laborer, reap proportionable benefits with the cultivators of the soil.

At the Annual Meeting of the Tenants of the Earl of Erne's Estate in Ireland, Capt. Skinner, the benevolent and zealous Secretary of the Irish Flax Improvement Society, addressed the meeting; from whose speech we take the following brief and important extract:—

Three years since, the quantity of Irish flax grown was computed to be about 25,000 tons. The increase of value upon this amount effected through the exertions of the Society was, at the least, taking a general average, £10 per cent., which would gain a sum of £250,000 additional in circulation among our farmers. But, my Lord Erne, it is now understood by calculations, there will be fully 14,200 tons of flax more in the markets this season than there was three years since, which, at the low rate of £45 a ton value, would give the sum of £643,050; and this, added to the above additional value, makes it clearly appear that fully a million of money

above the usual expenditure will be retained in the country and expended in the home market this season, contributing thus to the welfare of the community at large. But to prove, my Lord, that this calculation is not fallacious, we have positive corroboration of the fact, by taking the official return of imports of foreign flax for the last four years, which shows a gradual decrease, and in a ratio commensurate with the Society's successful exertions to increase the growth and promote its better preparation at home. It was stated before a committee of the House of Commons in 1840, that the amount of the importation of foreign flax from all the Continent furnishing into Great Britain, was 80,000 tons; in 1841 it was much under this amount; in 1842 it was in round numbers but 67,000; and in 1843, 55,000 tons. Here we have facts substantiating the former views that we are gradually becoming more independent of the foreign supply; and I can affirm on the experience of the past and practical knowledge acquired by an agriculturist abroad and at home, that no reason exists whatever why the whole quantity of the raw material required to keep our manufactories in full employment, may not be produced at home, both in quantity and quality, and thus the great drain of wealth, the purchasing of it from foreign countries (countries, too, with whom we have no reciprocal transactions), may be checked and circulated at home to the enrichment of our farmers, and weal of Ireland. Let there be, therefore, no cessation of exertion to raise the supply required, and be assured that we have both the climate and the soil to grow it to any perfection, if but due skill and attention are given to it. But look at these specimens of flax, and those beautiful fabrics which I brought with me, as samples of what the Irish farmer can produce, and the Irish weaver can turn out. No country in the world can surpass them. This linen of 28vo, was woven near Lisburn, and this cambric at Lurgan—the prize pieces were even finer. The linen that obtained the medal of the Royal Agricultural Society was 30vo, and will be presented to her Majesty. At the recommendation of the Flax Committee, the Royal Agricultural Society gave premiums for yarns at their late meeting, the object of which was to try if the description of yarn made use of in the manufacturing of cambrics could not be furnished at home. It is of a quality the mill-spinning cannot produce, and some £30,000 worth has now to be imported annually for the cambric factories at Lurgan, Warrington, and elsewhere, that are so successfully competing with and excluding the French and other foreign countries from the English market. The result was most gratifying. Some forty specimens of spinning on the old system were sent in, and the lowest number of them was 23 hanks to the lb., and up so high as 41 hanks. Now from 16 to 30 hanks to the lb. is what is required, and if the count could be depended upon, and quality be equal, 40 hanks at any time would find a good market, and the poor industrious woman make the value for her husband's fine flax of a lb. not worth 6d., amount to 20s. or 30s. New resources are thus opening out for our people, and those of this fine country becoming daily further developed. In conclusion, I would just direct attention to these flax machines which Lord Erne has

kindly taken as models for you. The beetling one will save you much labor, and no mill can do its work so well—the rippling combs, I hope also to hear will be in great use next season, even if you can afford to throw away the bolls of your flax, then take them off, as no flax can be properly handled with them on. It should be done at the time of pulling, or if the flax is dried and stacked, then they must be threshed out carefully like grain, but without untying the beets.—Condensed from *Warnes' Treatise*.

THE MOSS ROSE.

THE Moss Rose (*Rosa centifolia muscosa*), or Mossy Provence Rose, is most probably an accidental sport or seminal variety of the common Provence Rose, as the Old Double Provence Rose, which was introduced to England from Holland in 1596, is the only one mentioned by early writers on gardening. If it had any claims to be ranked as a botanical species, the single-flowering Moss Rose would most probably have been the first known and described; but the single moss, as compared with the double, is a new variety. The year 1724 is recorded by botanists as the date of its introduction, or rather of its being first noticed in Europe, and Miller mentions it in 1727. Some few years since a traveller in Portugal mentioned that the Moss Rose grew wild in the neighborhood of Cintra; but most likely the plants were stragglers from some garden, as I have never seen this assertion properly authenticated. The origin of the Double Moss Rose, like that of the Old Double Yellow Rose (*Rosa sulphurea*), is therefore left to conjecture; for gardeners in those days did not publish to the world the result of their operations and discoveries. As regards the Moss Rose this is a subject of regret, for it would be very interesting to know how and where this general favorite originated. Probably, when first noticed, gardening was of such small consideration, that the discovery of a rose, however remarkable, would not be thought worth registering. That it is merely an accidental sport of the common Provence Rose is strengthened by the fact, that plants produced by the seed of the Moss Rose do not always show moss; perhaps not more than two plants out of three will be mossy, as has been often proved. Those that are not so are most evidently pure Provence Roses, possessing all their characters. To show, also, the singular propensity of the varieties of *Rosa centifolia* to vary, I may here mention that the common Moss Rose often produces shoots entirely destitute of moss. Mr. Rivers makes mention of his having observed a luxuriant branch of the Crimson or Damask, which is generally more mossy than the Old Moss Rose, that presented a remarkable appearance, being almost smooth. The next season it had entirely lost its moss, and had produced semi-double flowers, the exact resemblance of the Scarlet Provence. The White Moss is another instance of this singular quality, for that originated from a sporting branch; the Mossy de Meaux is also a curious deviation, and the Crested Moss or Provence, is another case in point. It seems, therefore, very feasible, that the Provence Rose, from being cultivated in Italy through so many ages, produced from seed, or more probably

from a sporting branch, the Double Moss Rose, that is, a Double Cabbage or Provence Rose, covered with that glandular excrescence which we term moss; this brancher plant was propagated, and the variety handed down to us, perhaps as much or more admired in the present day as when first discovered. These Roses always have been, and I hope always will be, favorites; for what can be more elegant than the bud of the Moss Rose, with its pure rose-color, peeping through that beautiful and unique envelope?

The assertion advanced by some writers that this Rose, when cultivated in Italy, "loses its mossiness almost immediately, through the influence of climate," is puerile, when the fact is so well known to us that it retains this distinctive character at New Orleans, and at other localities far exceeding Italy in an approach to a tropical climate.

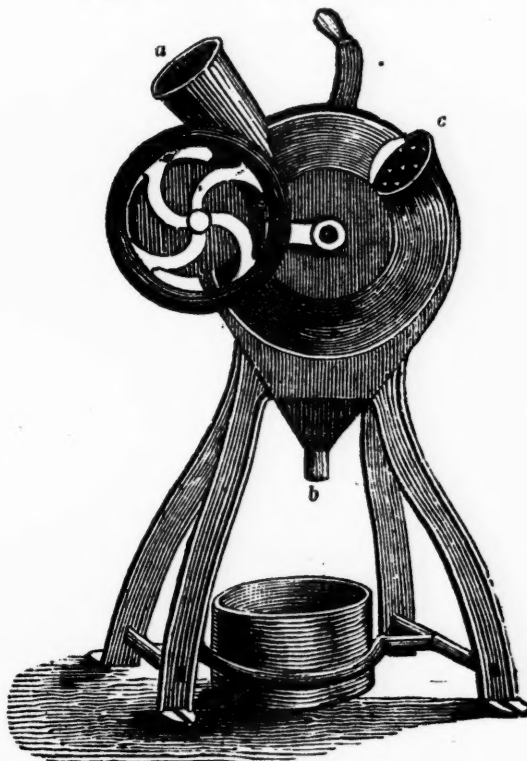
The ancient variety which we have referred to, called the Common Moss, Mossy Provence or Red Moss Rose, is of a pure rose-color, and when in bud is surpassingly beautiful. When fully expanded it is a fine rose, but at that period, the moss being concealed beneath the petals, it no longer presents to the eye its distinctive attraction. During nearly a century that this rose existed in Europe, no new variety was produced, but of late years the greatest attention has been devoted to the production of seminal varieties, and the success has been so triumphant that not less than 70 fine varieties have been produced, including some which bloom several times during the year, and others hybridized with the Bourbon and other classes of roses. I have, at great expense, imported the entire collection.—*Prince's Manual of the Rose.*

PRESERVATION OF POTATOES.

If potatoes are immersed for four or five days in ammoniated water, containing an ounce of the common liquor ammoniac to a pint of water, they will, on removal, be found to have their vegetative principle greatly checked, or altogether destroyed, so that they may be preserved throughout the year without the least deterioration of their general qualities. The temporary action of the ammonia in no way affects the potato beyond that of destroying its power of growth; if, however, any change is produced, it is rather beneficial than otherwise, somewhat improving the appearance and flavor of inferior potatoes, and giving them a mealiness they did not possess. The transient nature of the application removes any suspicion of injury from the material employed, and it is all lost by evaporation, so that not a trace remains behind; nor could the most fastidious ever detect that the potatoes had been immersed in ammonia, so volatile is its nature, so perfect its escape. The exportation of potatoes to foreign climates, chiefly within the tropics, is an object of importance; and for the comfort of sailors there is nothing in the way of diet greater than the luxury of a potato with their salt food. As a means of prolonging their enjoyments, and adding to the healthful diet of a sea life, this mode may be adopted with advantage. The expense of immersion is very trifling, and they subsequently require to be spread in an airy situation to dry. Potatoes so treated, have been used after ten months' keeping

in a warm kitchen closet, and were found to be perfectly good. If the potatoes, instead of being removed in five days, are continued in the ammoniacal water for three weeks, the potato becomes tough and shrivelled while in the liquor, and, when dried by exposure to the air, assumes quite a new form; it appears consolidated, and its qualities are greatly lost, for on boiling it assumes the appearance of sago, or starch, yet still firm, and retaining its form; if used in the dry and uncooked state it has a mealy flavor, and the properties of grain. There is no chemical change effected in the potato, but merely a mechanical consolidation and extraction of moisture; for precisely the same effect may be produced by immersing potatoes in a strong solution of salt and water, taking care to remove by subsequent ablution the whole of the salt, and this requires some time, and repeated changes of water.—*Edinburgh Journal of Agriculture.*

BURRALL'S CORN-SHELLER.



BURRALL'S CORN-SHELLER.—FIG 79

THIS truly labor-saving machine is constructed of various sizes, and is made entirely of iron. The upper part consists of a strong chamber or box, in which revolves a short cylinder or disk armed with numerous teeth, as is also a portion of the inner surface of the box. The ears of corn are dropped by hand or otherwise, into the opening, *a*, and when the cylinder is set in motion by means of a crank or other power, the cob comes out at *c*, and the corn falls through a hole at *b*, perfectly shelled. A man and boy can shell five bushels in an hour, and if a steam or horse-power be applied, with proper fixtures for feeding in the corn, 100 bushels may be shelled in a day! We strongly recommend this machine to farmers, notwithstanding its cost, as an improvement in every respect over the common mode of shelling corn with a frying-pan or fire-shovel, by hand. Price \$10 to \$12.

POPULAR ERRORS.—No. 2.

Shrinking and swelling of Meat in the Pot.—When children, we used to be told that pork, beef, &c., killed in the *old* of the moon, would *shrink in the pot*; and if in the *new*, it would *swell*; and a great many good, honest farmers, religiously observed her waxing and waning quarters for their periodical packing. That some meat shrinks, while other swells, is a fact too notorious for cavil; but that the moon is to be praised or blamed for this agency we most fully deny. The true cause of these changes is to be found in the manner of feeding the animals before slaughtering. An animal that has been long and well fed, till the fat cells have become fully charged with solid matter, will, on exposure to boiling water, absorb a portion of it, and consequently swell the dimensions of the flesh; while that which has been hastily or but partially fattened, will diminish in cooking from the abstraction of the juices which occupied the cavities or spaces between the lean fibres. This is the *whole secret* of the *shrinking and swelling* of meats. It will thus be perceived that one carcase of equal weight may differ materially in value from another of nearly the same apparent quality. This difference in value is equally manifest in the quality of fish and poultry. Eggs from well-fed hens are also much more rich and substantial than those which are produced by hens sparsely fed. The latter will invariably be found meagre and watery.

Horseshoes—not for shoeing horses, but for “keeping out witches,” are still a staple article among the farmers of our country. Indeed, they have not yet been entirely driven out of the printing-offices, for we saw a formidable one recently protecting the only door to this domicile of the printer’s devils. What particular style of shoe is necessary for the utmost efficiency of keeping out witches, we are not advised; whether of concave, flat-toed, sharp-corked, or what not; but we believe it should invariably be pretty thoroughly worn; the older and the uglier the more efficacious. We should think additional virtue would be imparted to it, if taken from a horse that had died of strangulation or some unknown disease; and if from an old blind, spavined, wind-broken mare, that had slunk her foal, we presume entire impunity would be secured.

Reason and philosophy have both been brought to bear on this subject, without success, for here is a practice above and beyond the reach of both. “Our fathers did it, and they are wiser than we, and nobody knows that it does not keep them off, and we shall do as they have done.” As old horseshoes are not expensive, and have been found a good substitute for *new hemp*, which is more saleable, and at a higher price, we commend the present practice over the older one, where hemp was almost entirely substituted. Oh, we forget, we believe they did sometimes drown and burn witches as well as hang them.

Setting out Fruit Trees.—It is a great error that trees will not grow in any soil where they can spread their roots, provided the ground be first deeply plowed and well pulverized, or holes be dug in it sufficiently large for the roots to spread, and then the proper elements be added, if deficient in

them, to make wood and fruit. We can instance many a place in this vicinity, where it is said the pear or peach tree will not flourish. Now this is all gammon. We say they will grow, and that luxuriantly too, and bear any quantity of fruit.

A friend of ours, in Westchester, was told by his neighbors when he first set out his peach trees, that they would all die because the soil was not suitable for them. He had little faith in such prognostications, but went resolutely to work. Dug large holes—put a wide flat stone at the bottom—cut off the tap-root—manured the ground well—plowed it deeply—planted potatoes—then corn—then put plenty of charcoal and lime about the trunks of the trees—then more manure and planted again in potatoes—and then sowed oats and grass seed. In five years from planting the peach stones, he had a large quantity of the finest quality of fruit, which his neighbors were very glad to beg of him, notwithstanding they had prophesied he could not grow them.

Another friend of ours, on the south side of Long Island, found a patch of stiff soil, with an admixture of clay in it, not far from his residence. He set out pear trees on a poor sandy soil, and carted three loads of this stiff soil and spread around each tree. In other respects he treated them and the soil very much as our Westchester friend did the peach trees. This was nine years ago. Now, he has plenty of choice pears, while his neighbors, for miles around, have not a single one, merely because they acted on the belief that neither the soil nor the climate was suited to grow them!

COMPARATIVE VALUE OF IRISH AND VIRGINIAN TOBACCO.—In the year 1829-30 the cultivation of tobacco in Ireland excited much attention among agriculturists, and several hundred acres of it were raised in different counties; in consequence, the attention of the Royal Dublin Society was directed to the subject, and the author was requested by a select committee of that body to institute experiments on tobacco with a view to determine some questions of a practical nature, as to whether its root contained nicotin, and in what quantity, and to ascertain the comparative value of Irish and Virginian tobacco.

The author’s experiments were made on average samples of Virginian and Irish tobacco; for the former he was indebted to the kindness of Mr. Simon Foot, and for the latter to Messrs. Wild, Cuthbert, Cathwell, and Brodigan. From a number of experiments the author was led to conclude, that the dried roots of Irish tobacco contain from four to five parts of nicotin in 100 parts; and that one pound of good Virginian tobacco is equivalent in value to about twenty-four pounds of good Irish tobacco.

After the author had finished his experiments, it was gratifying to him to be informed that some manufacturers estimate one pound of Virginian tobacco equivalent in value to about two pounds of Irish.—*Proceedings of the British Association.*

TO PREVENT THE SMOKING OF A LAMP.—Soak the wick in strong vinegar, and dry it well before you use it; it will then burn sweet and pleasant.

TREATMENT OF MULES.

"GASTON," on page 187 of the *Agriculturist*, gives his sad experience with stock, and makes a most lamentable face of it, in being "the most unfortunate people in the world." He gives you, I know, a faithful account of the how, that work-horses are generally treated—but I, for one, enter my *caveat* against the treatment, and say, no man has any right to accuse our Maker of partiality, who will treat stock in this manner. I here give you a true and plain statement how I do, and defy a man to visit the Hall and find anything to the contrary.

My team turns out about 4 o'clock, these days, say, about daylight; at 11 o'clock the horn sounds, which calls them from the field; the mules are all turned into a lot, where my cows are fed and milked, having in it a trough 50 feet long, under a roof, in which salt lies the year round, with ashes occasionally mixed therewith. Here the mules walk about, wallow, and rest until cool; when they are turned into a horse lot adjoining, and driven in one corner to water; they, of their own accord, return to the stable, where food is present, each one to his stall, there tied, curried, and rubbed—my manger is never empty. At 2 o'clock, P.M., the horn again sounds, when the hands turn out, having watered again, and work until dark, when they return to the lot, and undergo similar treatment.

I use no racks, I use no long provender; and about half the time I use cob and corn meal; provender and the latter is thoroughly sprinkled, so as to be damp, with a weak brine. I feed about one week with the meal above mentioned and cut stuff—being fodder, millet, hay, and shucks—another week on corn and cut stuff. My troft—(Webster says trough)—is 2 feet wide at bottom, 1 foot deep, 2½ wide at top, and 5 feet long, with a partition of about 20 inches for corn; it is cleaned out of everything, once a week, and when wet stuff has been used is well cleaned out with a cloth wet in brine.

This is my mode—and I was born and raised in this glorious South, and here mean to live and die—and, by the by, except one mule, I have not had a case of colic, since the Sheriff, *et id omne genus*, drove me out of fine doings in 1839, to attend to this small business. I say now to friends, North, South, East, and West, I do not in truth consider there is anything in this, but system, and believe it was my profession that gave me this, which leads me to say, as I do believe, that the doctors of America are bound to be as useful men to this country, in giving more system to the science and art of agriculture as any other class. I am proud of my profession, and proud of my country, and say that I may stimulate my brother chips to greater exertion, and that my brethren of this clime may profit thereby, as well as by my feeble pen.

M. W. PHILIPS.

Edwards' Depot, Miss., June 15th, 1846.

IRISH MODE OF BOILING POTATOES.—Wash the potatoes clean without breaking or cutting the skins. Drop them into a pot of boiling water, adding a little salt, and let them remain until sufficiently soft for a fork to be easily thrust through

them. Pour off the liquid in which they have been boiled, and dash in cold water in its stead. Let the potatoes remain two minutes; pour off the cold water; place them over a slow fire, with the pot-lid partially removed, and let them steam until nearly dry. Then peel, and place them on the table in an open dish.

GARDENING.—No. 9.

Of the Agency of the Atmosphere in Vegetation.—The atmosphere is composed principally of water, carbonic acid gas, oxygen, and azote. The quantity of water that exists in the air, as vapor, varies with the temperature; the hotter the weather the greater the quantity. At 50° of Fahrenheit one-fiftieth of volume, or about one-seventy-fifth of weight of the air, is vapor; while at 100°, the vapor is one-fourteenth in volume, or one-twenty-first in weight. It is a beautiful feature in the economy of nature, that aqueous vapor is most abundant in the atmosphere when it is most needed for the purposes of life; for, in very intense heats, when the soil is dry, the life of plants seems to be preserved by the moisture in the air, which is absorbed by the leaves.

The quantity of carbonic acid gas in the air is very small; probably, where there is a free circulation, not to exceed the one-fiftieth part. The principal consumption of the carbonic acid in the atmosphere seems to be in affording nourishment to plants; and some of them appear to be supplied with carbon chiefly from this source. The action of the atmosphere on plants differs at different periods of their growth, and varies with the different stages of the development and decay of their organs. If a healthy seed be moistened, and exposed to the air at a temperature not below 45°, it soon germinates, and shoots forth a plume which rises upwards, and a radicle, which descends. Seeds are incapable of germinating, except when oxygen is present. From this it is evident that, in all cases of semination, the seeds should be sown so as to be fully exposed to the influence of the air; and one cause of the unproductiveness of cold clayey adhesive soils is, that the seed is coated with matter impermeable to air. Any seed not fully supplied with air, always produces a weak and diseased plant.

Dew is the moisture insensibly deposited from the atmosphere, on the surface of the earth. This moisture is precipitated by the cold of the body on which it appears, and will be more or less abundant, not in proportion to the coldness of that body, but in proportion to the existing state of the air in regard to moisture.

Rain is considered to be the result of the electrical action of the clouds upon each other. The quantity of rain varies with the latitude. The warmer the air, the greater is the quantity of vapor precipitated; hence the reason why rains are heavier in summer than in winter, and in warm countries than in cold. There are some countries where it scarcely ever rains. For example, in South America, the clouds seem to be checked in their progress from the Atlantic, by the Andes; and while the sides of the mountains are deluged with frequent showers, the plains of Peru and Chili,

west of them, are entirely destitute of rain. Such countries are watered entirely by mountain streams, and by the dews, which are very heavy. The average quantity, in different latitudes, as stated by Humboldt, is as follows:—

		Mean Temp.	Rain.
Under the Equator,		81.5	96 inches.
North Latitude,	19°	79.25	80 "
"	45°	68.	27½ "
"	60°	38½	17 "

Water is absolutely necessary to the economy of vegetation in its elastic and fluid state, and also in its solid form. Snow and ice are bad conductors of heat; and when the ground is covered with snow, or the surface of the soil or of water is frozen, the roots or bulbs of the plants beneath are protected by the congealed water from the influence of the atmosphere, the temperature of which, in northern winters, is usually very much below the freezing point; and this water becomes the first nourishment of the plant in early spring.

Of Manures.—Every species of matter capable of promoting the growth of vegetables, may be considered as a manure. Decaying animal and vegetable substances constitute by far the most important class of manures, or vegetable food. Vegetable and animal substances deposited in the soil, are consumed during the process of vegetation; and they can only nourish the plant by affording solid matters capable of being dissolved in water, or gaseous substances capable of being absorbed by the fluids in the leaves of vegetables. The great object, therefore, in the application of manure, should be to make it afford as much soluble matter as possible to the roots of the plants, and that in a slow and gradual manner, so that it may be entirely consumed in forming its sap and organized parts.

Mucilaginous, gelatinous, saccharine, oily, and extractive fluids, are substances that in their unchanged states contain almost all the principles necessary for the life of plants; but there are few cases where they can be applied as manures in their pure forms. All green succulent plants contain saccharine, or mucilaginous matter, with woody fibre, and readily ferment. They cannot, therefore, if intended for manure, be used too soon after their death. Hence the advantage of plowing in green crops, whether natural or sown for the purpose; they must not, however, be turned in too deep, otherwise fermentation will be prevented by compression and exclusion of air. Green crops should be dug in, if it be possible, when in flower, or at the time the flower begins to appear; for it is at this period that they contain the largest quantity of easily soluble matter, and that their leaves are most active in forming nutritive matter. Yeast is one of the most powerful and durable of all manures. Unfortunately the article is too expensive to be much used for this purpose, but it will well pay for a trial on fine plants.

Fish forms a powerful manure, in whatever state it is applied; but it cannot be used too fresh, though the quantity should be limited. The skin of the fish is principally gelatine, which, from its slight state of cohesion, is readily soluble in water; they contain also fat or oil, either under the skin or

in some of the viscera, and their fibrous matter contains all the essential elements of vegetable substances.

Bones are also much used. These are ground in a mill and applied to the land in the form of powder or dust.

Sea-weed is much used on the sea-coast as a manure. It is very transient in its effects; but is nevertheless of much value in situations where it can be obtained. The most common method of using it, is to convey it directly to the land, and apply it fresh as a top-dressing to the growing crops. If not applied in its recent state, it should be formed into a compost with dung, or with a mixture of that and earth.

Peat is a substance which may be used as a manure; but unless freed of its acid principle it may remain for years exposed to water and air without undergoing decomposition, in which state it can afford no nourishment to plants. It should, therefore, be made to undergo decomposition before it is applied to the soil. This may be done by long exposure to the air, or by mixing it with newly-made and completely slacked lime, which decomposes the woody fibres, and forms a kind of compost which is of some value. Amongst excrementitious solid substances used as manures, one of the most powerful is the dung of birds that feed on animal food, particularly that of sea-birds. This guano which is used to a great extent in South America, and which has attracted much attention in this country for a few years past, is the manure that fertilizes the sterile plains of Peru. It exists abundantly in the small islands in the South Sea, and appears as a fine brown powder.

Liquid manure, being the drainings of the stables, is a strong fertilizer. If applied to corn when sprouting or just before a rain, it has an effect which no other manure has. It destroys insects, and throws a surprising degree of vigor into the crops.

The dung of horses, oxen, and cows, is found to contain matter soluble in water, and that it gives in fermentation nearly the same products as vegetable substances, absorbing oxygen, and producing carbonic acid gas. This should always be made to ferment in the soil, or should be formed into a compost by the addition of one-half leafy mould.

L. T. TALBOT.

HOW TO INCREASE THE FRUITFULNESS OF ORCHARDS.—Alkaline, or ammoniacal preparations, have been applied to young trees, as well as to old ones, for the purpose of stimulating their growth, and accelerating their fruitfulness, such as white-washing their trunks and branches, rubbing them with soap-suds, and spreading round their roots lime, gypsum, charcoal, soot, ashes, &c.; and "human urine," says Columella, "which you have let grow old for six months, is well fitted for the shoots of young trees. If you apply it to vines, or to young apple-trees, there is nothing that contributes more to make them bear an abundance of fruit; nor does this only produce a greater increase, but it also improves both the taste and flavor of the wine and of the apples."

DESTRUCTION OF THE COTTON CROP
BY INSECTS.

THE caterpillar, cotton worm, cotton moth (*Noc-tua xyliana*), or chenille of the French West Indies, Guiana, &c., has utterly blighted the hopes of the cotton planter for the present year, and produced most anxious fears for the future. I have heard from the greater part of the cotton-growing region—the news is all alike—the worm has destroyed the crop. I have no idea that any considerable portion of any State will escape.

This destroyer has cut off the crops, in different parts of the country, several times, but has never before appeared so early in the season, the plant being at the same time so unusually backward. In 1840, these insects did not appear, in Southern Mississippi, until just before the first frost. In 1844 they commenced the work of destruction about the 1st of September. During both of these years, the crop was well matured, the fields being as white as at any period whatever, after the worms had stripped off the leaves. The present year, the crop is unusually backward; at least four weeks later than usual. We have but just commenced picking; usually beginning about the last week of July, or the first of August. At this moment, every field within this region of country, say south of Vicksburg, is stripped of everything but the stems, the larger branches, and a few of the first bolls, already too hard for the worm's power of mastication. The full-grown bolls, not yet become hard, are completely eaten out, a circumstance I have never heard of but once before, in 1825—(See Southern Agriculturist, vol. 1, page 207). The fields present a most melancholy appearance. Looking from the bluff at Natchez, across the river, to those fine plantations back of Vidalia, nothing is to be seen but the brown withered skeleton of the plant.

The natural history of an insect so destructive to a crop of such great value to the world, must certainly be of the utmost importance to the growers of that crop. In fact, it is indispensable that a united general effort should be made to check their increase, if indeed that be possible, if cotton-growing is to be continued. And to do this, we must have a thorough knowledge of their nature and habits.

Although this caterpillar has been but too well known to the planters, in different parts of the South, ever since 1793, when they first appeared in Georgia, their ravages have been partial, and their appearance at long intervals. No longer ago than 1834, Mr. Spalding states (Southern Agriculturist, vol. 8, page 42) that "these destructive visitations, judging from the past, may be expected once in about seven years." In this part of the country, the belief was so general that they only came *once in four years*, that few would believe that the caterpillar was really amongst us. The more so, as during the first eight or ten days of their life, of such weather as we have had this summer, they, like the silk-worm, eat comparatively little. After that, they consume two or three times their bulk in a day, and will devastate a field, however large, in three days of warm weather. Seven years after their first appearance in Georgia, "they commenced the work of devastation in South Carolina. In 1804, the crop, which would have been devoured by them, was, with the enemy, effectually destroyed

by the hurricane of that year. In 1825 (between 1804 and 1825, their depredations were only occasional, and then confined to particular fields) the visit of the worm was renewed, and its ravages were universal and complete. In 1827, '29, '33, '34, '40, '41, and '43, the Lower Parishes generally, in particular locations, suffered greatly by its depredations. The injury that has been done by the caterpillar is almost incredible. In one week they have denuded of its foliage every stalk in the largest field. In the Bahamas, between March and September, 1788, no less than 280 tons of cotton, on a moderate scale, were devoured by this worm. Among the causes of failure of the crop in that quarter, as ascertained by answers of the most intelligent and experienced planters to questions proposed by the House of Assembly, the most prominent is the destruction by the chenille. The same cause produced the abandonment of the gossypium culture in several of the West India Islands."*

In Guiana, the chenille has greatly lessened the amount of cotton made. For an interesting, though somewhat erroneous and speculative account of their ravages there, and other matters connected with their appearance and disappearance, preventives and checks to be used, &c., see the Edinburgh Ency., Article—Cotton.

In the Southwest, they have appeared at intervals ever since 1804. I cannot learn, however, that they have ever done serious injury to the crops before the present year, except on Red River. There they have paid their visits more frequently, and in greater numbers, greatly lessening the value of those splendid cotton-lands, and almost compelling their abandonment. They have never, before this season, commenced the work of destruction, elsewhere, until so late in the year, that the cotton was too well matured to be greatly injured, except by the trashing of the fibre from the excrement and scraps of leaves dropped, and the numerous chrysalides wound up in it. Neither was a third crop of worms produced, to occasion the general, wholesale destruction their early coming has caused this year.

It was almost amazing to see the perfect ignorance of the nature of such a scourge, displayed by the editors of both city and country papers, in their assurances to their readers, that "the alarm excited by the appearance of the *army worm* (as they almost all erroneously called it) might now be laid aside, as their advices from the country stated that they had done less harm than was at first apprehended." They were fast disappearing as caterpillars, to re-appear as moths in eight or nine days, and leave, each pair of them, a progeny of from 500 to 1,000!

The parent of these destructive myriads has been fully described by Say, at page 203 of vol. 1 of the Southern Agriculturist, to which the reader is referred. The greater number of your readers will, perhaps, better understand my plain, farmer-like account of them.

The moth is about three-fourths of an inch in length, and of nearly the same breadth at the points of the wings, when at rest; the color an ashen-grey,

* Seabrook's Memoir on the Cotton Plant; and Edwards' West Indies.

with an olivaceous-bronze tinge. The outer or upper wing has three minute white spots along, and close to, its outer edge; the first about three-sixteenths of an inch from the neck; the others each an eighth of an inch below—still lower, is a kidney-shaped black or brown spot, shaded with white, many times larger than the small white ones, a fourth one of which forms the upper end of the dark spot. Across the wings are several wavy purple lines, resembling the letter W. There is also a fringe of the same color, on the inner edge, and one of purple and grey at the end. The under wing, which is of a lighter color, is fringed in the same manner. The body is thick, and tapers to the end. The female is larger than the male, but otherwise they are much alike. Their duration of life is about five to seven days, during which they may be seen, in the evening, flying about the blossoms of the cotton plant, the cow-pea, &c., feeding upon the honey of the flowers, sucking it up like the rest of their kind, through the long tube they keep coiled up, when not so employed. At this time, too, the female deposits her eggs, scattering them over the leaves of the cotton plant, attaching them, to the number of from two to six hundred, or more, to the lower side, by a very short thread. The egg is minute, almost transparent, so that the color of the leaf gives it a green appearance. When detached, they are white.

These eggs hatch in from two to five days, according to the weather, and some say the phase of the moon; the young larvæ are very minute, but immediately commence eating the leaves of the plant, and increase rapidly in size, attaining their full growth of one and a half inches, in from fourteen to twenty days. During the first ten days of their life, they merely puncture the leaves, and eat round their margins, doing comparatively little injury; and at this time, too, they moult or cast their entire skin, at least four times. After that their voracity is absolutely astonishing. They eat up, in three or four days, not only all of the leaf, but the calyx or squares, the young and even full-grown bolls which are not yet hard; and of these they gnaw the outer rind, so as to cause the boll to rot. This year, owing to the immature condition of the cotton plant, they are able to consume all but the main stalk and the stoutest limbs; so that what bolls they left, which were not thoroughly ripe, are not maturing; and in many fields, where the plant was still more backward, it is drying up to the ground.

The caterpillars differ in color; some being all of a light green, with some stripes of yellow; but the general color is light green, with longitudinal stripes of yellow on the sides, and along the back two black ones, separated by a very narrow, clear line of white. What may be the cause of the difference in their general color, I cannot say; the markings, however, show that they all belong to the same family. They are studded all over with small, distinct black spots, from each of which a black hair grows. This caterpillar has sixteen legs—one pair behind, eight in the centre of the body, and six near the head. It elevates the front half of the body, when at rest, giving it a continued motion from side to side; and when touched, it doubles up and jumps off to some distance. They

give forth, when even few in number in a field, a peculiar sweetish odor, which is yielded neither by the worm nor the plant alone; and which, when smelled by a planter, will not readily be forgotten. Their presence is thus easily and certainly detected. When it has attained its full growth, it places itself near one of the corners or lobes of the leaf, spins a few threads of silk, attaching them to the leaf in such a way as to draw up the edge, which it makes fast to the surface, forming a scroll, within which it undergoes its transformation to a pupa. When the leaf has been all consumed, they attach themselves, for this transformation, to the leaf of any plant within reach; and, unfortunately, too often make use of the loose fibre in the open boll, for this purpose; and being gathered with the cotton, are cut up by the gin, staining and trashing the cotton very injuriously.

The pupa is black or dark brown, and shining. From the moment it begins to spin, until it issues from the pupa, a perfect moth, is from eight to nine days of warm, seasonable weather. But if unusually cool, it extends to a longer period; even to weeks. Hence, I am inclined to think, that it is in the pupa state the insect is preserved over winter. In fact, there is no doubt that many are thus saved—the moths that are seen occasionally on a warm winter's day, having been hatched prematurely by the unseasonable warmth of the weather, and quickly perish from cold and want of food. But whether we at all times receive our supply from this source; or whether (which I think quite as probable), they are not unfrequently brought on a gale of wind, from the West Indies, Mexico, or the coast of Guiana, will be difficult to decide. My observations lead me to the conclusion, that after a steady cold winter, we have the caterpillar early, and in abundance; and that after a mild or warm one, we have them, if at all, but partially, and late in the season. The pupa is frequently found during winter, safely sheltered under a scale of bark, between two evergreen leaves, under the splinter of a fence rail, or in a tuft of pine leaves.

We find then, that during the summer, and particularly if the weather be close, dark, and sultry, this insect increases and multiplies itself with great rapidity. One pair of moths saved over winter, actually produce in from four to five weeks, say 400. If even half of that number escapes, we have in less than five, and often in four weeks, 40,000; which again produce 4,000,000, whose progeny would destroy a whole crop. And I suspect that the actual progressive increase is greater than even this would show.

I have this moment received a note from my overseer on Cold Spring plantation, in Wilkinson County, in this State, from which you must permit me to quote, though unwilling to intrude myself or my own concerns. "The worms have finished the cotton. *They have not left a leaf or young boll on it.* I never saw cotton eaten so clean. I cannot make more than half a crop, *if that.*" He is an experienced cautious man, and had a remarkably fine, promising crop, though backward, of course, like every other this season, before the appearance of the worm. Thank heaven, I have plenty for my people to eat, at all events. The corn crop is generally good, in this region.

I do not believe that the planter is any very great sufferer, so long as *half a crop* is made generally.

There is another worm about which I should like to speak, but am not yet prepared, nor have I space here. It is known as the *Boll or Bore-worm*. It commits great havoc on the young boll, eating out all of its contents, and, of course, destroying it. I suppose I speak within very safe bounds, when I say, that twenty per cent. of all the bolls formed upon the plant—you must know that not more than half the blossoms on a plant become bolls, but drop off, calyx and all, before they reach that stage—have been cut off by this worm. It is the larva of a moth. Of its history I shall speak when better prepared. It is most injurious in low, rich lands.

I am, at this time, cutting a second crop of hay from my meadow, such as you never saw, I feel confident. I hope to get in a third crop, by and by.

THOMAS AFFLECK.

Ingleside, Adams County, Miss., Sept. 9th, 1846.

MANAGEMENT OF HONEY-BEES.—No. 5.

THE ground around and under the hives should be kept free from weeds and grass. A hard smooth surface is best, as many a weary bee, on returning home, fails in reaching the alighting board, and falls to the ground, in which case, should the ground be encumbered with long grass and weeds, they might become entangled, and thus fall a prey to the hosts of spiders that infest such places. Nor is it any better for the safety of the bees, to have the ground in a loose mellow condition, as is the case when the hoe is carelessly used in cutting up weeds. In this state of the soil, such bees as fall to the ground, soon become covered with dust, and are unable to rise. The best way to kill the grass and weeds, is to saturate the ground in the spring with boiling hot brine, which will effectually put a stop to vegetation. This being done, lay a strip of board along in front of your hives, as a rising point for bees that return home heavily laden and fall around the hives, which often does occur, and if you will take the trouble to watch them, you will perceive that they often fail to get upon the wing, until they ascend some small eminence, from which they take a start, and regain the hive. This may be considered a small matter by many, yet our success in every branch of business consists in our attention to the minutiae of our object, which in the end shows forth a triumphant result. Suppose by our neglect of cleaning around our hives, we lose the small number of *ten* bees per day, the result would be as follows:—from the first of April to the first of November, we have 214 days, and a loss of 2,140 bees! It is by such means that so many fail in their success with bees, and eventually “run out,” as it is termed.

There is another consideration which merits our attention. Whoever has had a prosperous colony of bees, must have often seen large clusters of bees hanging in inverted cones from the bottom-boards; and perhaps he has frequently seen them fall to the ground by their own gravitation, or the force of the wind. It is particularly necessary on this account, that the grass and weeds around the hives should be extirpated. Whenever I perceive any of my

hives liable to such a result, I crop a few handfuls of grass and spread it directly under the hives, and whenever the clusters fall, they are protected from the dirt, and the bees adhere together (if at night or during a storm), till the rays of the sun call them forth.

In the months of May and June hundreds of bees are seen running upon the ground, in a disabled condition, endeavoring to rise upon the wing, but without success. This always takes place during the height of the breeding season. For several years, I attributed it to the fighting of different stocks. I could see the bees engaged in deadly strife, as I supposed, but I have since found that what appeared to me to be a combat between bees of different hives, was only the turning out of doors of such *imperfect* bees, as had been brought into existence in their respective hives. This fact was shown by the removal of a hive, for the purpose of producing an artificial swarm. I found the same quantity of disabled bees around the hive so removed, in a few hours after its removal, showing that they had no connection with any other hive.

The Enemies of Bees.—The *moth*, or universal enemy of the bee, is the only enemy that we need fear in this country. The wasp and the king-bird sometimes make havoc among them, but every enemy sinks into insignificance when compared with the *wax-moth*. Its first appearance is in May or June. It is of a grey or whitish color, similar to the millers that flit around the blaze of a candle, though not so large. It remains inactive during the day, but as soon as twilight sets in, it sallies forth from its hiding-places, and seeks out the weakest stock or swarms of bees for its operations. Having gained an entrance, it winds its way up the side of the hive that is the least protected, and having gained the summit, or a secure location, some distance from the bottom of the hive, it there deposits its eggs upon the surface of the comb, which in a few days are hatched out, by the internal heat generated by the bees, and become white worms or caterpillars. They at once commence weaving around themselves a white silken substance, as a protection against the bees. They then commence cutting away the combs and building galleries for their own use, from which they put forth their heads for food in every direction. Their heads are covered by a helmet impenetrable to the sting of a bee. When the bees perceive these insects thus at work, they commence cementing them in, and confining them to their original location, and consigning them to starvation, which is easily done, if there are but few of them, but in cases of weak stocks, with constant lodgments of the moth, they are soon undermined, and giving up in despair, they either leave the hive, or dwindle away in inactivity. The symptoms of the depredations of the moth may be known by the falling of particles of comb upon the bottom-board of the hive, of a brown color. By hanging the bottom-board of the hives on wires, one can see at once whether his bees are in danger from the moth. The best time to look is in the morning, and if you find a considerable covering of particles of comb, such as the gnawing of worms would be likely to make, and you find this for several mornings in succession, you may expect that the destroyer is at work.

When the bees become active and the winds arise during the day, this comb-dust is generally blown away, hence early in the morning is the time to examine, unless the stock is so far undermined as to give evident signs of it at any time. Another sure sign is in the *inactivity* of the bees. As soon as the moth gets the upper hand, the bees discontinue all operations. Many of them will leave, and join neighboring hives, but a few will remain faithful to the last, and die at their posts.

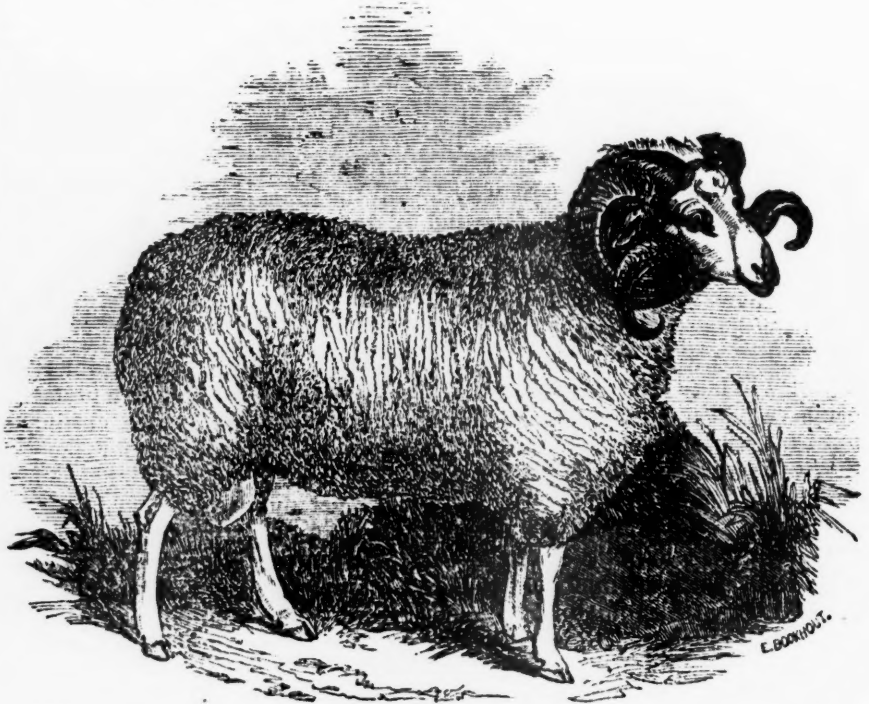
Every apiarian should be vigilant in looking to his hives in season, that he may at least save the honey, if not the bees, of his moth-y hives. If taken in hand in season, he may, perhaps, save his bees, by driving them into a new hive; but if the season is far advanced, the bees would have no time to build new combs, and lay up a new store of honey for winter, consequently, he may save the honey, and disperse the bees among his remaining stock, for there are but few bees generally, under such circumstances, and those few are but little inclined to defend their habitation, consequently the combs can easily be cut out by being properly protected by a bee-dress. But the great object is not to know how to manage *after* the moth has destroyed the stock, but how to *prevent* such a result; and to this end I shall now confine myself. Perhaps there is no part of the management of bees, upon which

there has been such a diversity of opinion and action, as upon a *prevention of the moth*. Some have deposited a little salt under the corners of the hives. Others have recommended catching them in basins of *sweetened vinegar*. Others, again, have trumpeted forth grand discoveries in the formation of hives, that prevent the entering of the moth, and more recently, some one pretends that a lining of *zinc* will frighten them away, or if they should deposit their eggs within the hive, by placing the hives near the ground, they would not hatch out! This is all moonshine. I give the moth every possible facility to enter my hives. I open *every* side to its ingress, with 48 inches of opening to every hive, yet they enter not. My hives are surrounded by scores of them in an evening, yet they stand impregnable. Not all the ingenuity of man can ever invent, or prescribe a remedy against the moth, aside from the *ability of the bees to defend themselves*. Here lies the grand secret! A certain management of the bees, whereby they are enabled constantly by the force of physical ability and numbers to even prevent the entrance of the moth. This is the *sine quâ non*—the grand desideratum that the world has been so long in search of, the philosophy of which I will give in my next. T. B. MINER.

Ravenswood, L. I., October, 1846.

SAXON SHEEP.

THE Saxon sheep is a variety of the pure-bred Merino, taken originally from Spain, into Germany. It derives its name from the kingdom of Saxony, where great pains have been taken in the improvement of the quality of the wool of the descendants of these Merinos, particularly in the Electoral flocks. Many contend that this improvement has been made to the injury of the carcase and constitution. In some flocks this may be true, but it is not so in all; for an importation made from Saxony the past summer, by Mr. Taintor, of Connecticut, showed as hardy, strong constitutioned, and well woolled sheep, as we have ever seen; and their fleeces were uncommonly heavy, fine, and even in quality. This is a convincing proof that improvements may go hand in hand, and that for the sake of obtaining one superior quality, there is no necessity of sacrificing others. For our own part we have not a doubt, that Merino and Saxon sheep-breeders may in due time and by paying proper attention, get as perfect forms for their animals as the improved Southdowns or Leicesters now show, and at the same time keep up the constitution of their flocks, their weight of fleece, and fineness of quality.



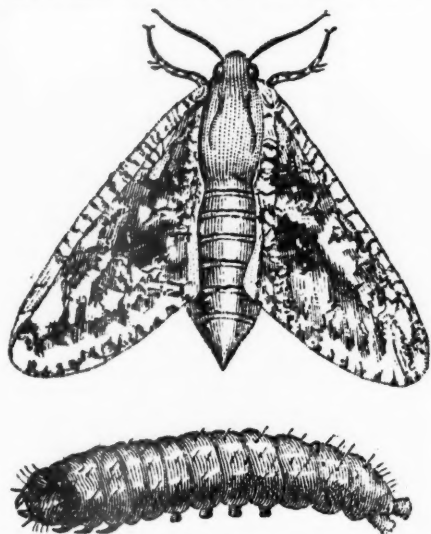
SAXON SHEEP.—FIG. 80.

The cut of the above Saxon sheep is taken from that excellent work, the *American Shepherd*, by L. A. Morrell. It is a spirited portrait of the best bred Saxons in point of form, though we should have preferred one showing thick wool on the legs and head, as many of the breed do, as this is indicative generally of larger, closer fleeces, and superior constitution.

Saxon sheep were first introduced into the United States in 1823. They are a valuable race, and

should be preserved and bred with care. It is to them that we are hereafter to look for such fleeces as can bear exportation to England and France, at a good profit. These foreign countries can procure the coarser qualities of wool elsewhere, and at a cheaper rate than the United States can at present produce them; but in the very fine qualities, we are persuaded no country can compete with us, if we continue growing them with the steady perseverance which usually characterizes our most intelligent and spirited sheep-masters.

INSECTS THAT PREY UPON LOCUST-TREES.

LOCUST-TREE BORER (*Cossus robinia*).—FIG. 81.

THE *Robinia pseudacacia*, in Europe, is very free from the attack of insects; but in those parts of the United States where this tree is cultivated, it is preyed upon by three distinct species of borers, or wood-eaters, the unchecked operations of which threaten an almost entire destruction of this valuable tree. Dr. T. W. Harris, in his "Report on the Insects of Massachusetts injurious to Vegetation," observes that, "One of these borers is a little reddish caterpillar, whose operations are confined to the small branches and to very young trees, in the pith of which it lives; and by its irritation it causes the twig to swell around the part attacked. These swellings, being spongy, and also perforated by the caterpillar, are weaker than the rest of the stem, which therefore easily breaks off at these places. My attempts to complete the history of this insect have not been successful hitherto; and I can only conjecture that it belongs to the *Agerians*, or possibly to the tribe of *Bombyces*." In the same work, he describes a second kind of borer, called *Clytus pictus* or the painted clytus. "In the month of September," he says, "these beetles gather on the locust-trees, where they may be seen glittering in the sun-beams, with their gorgeous livery of black velvet and gold, coursing up and down the trunks in pursuit of their mates, or to drive away their rivals, and stopping every now and then to salute those they meet, with a rapid bowing of the shoulders, accompanied by a creaking sound, indicative of recognition or defiance. Having paired, the female, attended by her partner, creeps over the bark, searching the crevices with her antennæ, and

dropping therein her snow-white eggs, in clusters of seven or eight together, and at intervals of five or six minutes, till her whole stock is safely stored. The eggs are soon hatched, and the grubs immediately burrow into the bark, devouring the soft, inner substance, that suffices for their nourishment till the approach of winter, during which they remain at rest in a torpid state. In the spring, they bore through the sap-wood, more or less deeply into the trunk, the general course of their winding and irregular passages being in an upward direction from the place of their entrance. For a time, they cast their chips out of their holes as fast as they are made, but, after awhile, the passage becomes clogged, and the burrow more or less filled with the coarse and fibrous fragments of wood, to get rid of which, the grubs are often obliged to open new holes through the bark. The seat of their operations is known by the oozing of the sap and dropping of the saw-dust from the holes. The bark around the part attacked begins to swell, and in a few years the trunk and limbs will become disfigured and weakened by large porous tumors, caused by the efforts of the trees to repair the injuries they have suffered." According to the observations of a writer in the "Massachusetts Agricultural Repository and Journal," vol. vi., the larvæ of this insect attain their full size by the 20th of July, soon after which they pass into the pupa state, and are transformed into beetles early in September. The third class of borers which attack this tree, is the *Xyleutes robinia* or locust-tree carpenter moth, of Harris; or the *Cossus robinia*, described and figured by Professor Peck, in the fifth volume of the "Massachusetts Agricultural Repository and Journal." According to Michaux, the ravages of these insects were first observed about sixty years ago; but their habits were not generally known before the year 1803, when they first attracted the attention of Professor Peck, of Harvard University. He observed several locust-trees that had been blown down by a storm, which were much bored by the larvæ of these insects, with their heart-wood dead. In splitting some billets of these trees, he found that they contained several of the caterpillars or borers, of different magnitudes, which enabled him to watch them through the various stages of their growth. "The furrows in the bark of the locust," says he, "are large and deep, extending, in some places, even to the liber or inner bark. It must be in the deepest of these furrows, that the egg to produce the caterpillar is deposited. The inner bark is thick and succulent, affording to the young larvæ a tender and proper food. The sap-wood is harder; this, too, is perforated to the perfect or heart-wood, on which it is afterwards to feed. This it bores in various directions, obliquely, upward and downward, making them larger as it increases in bulk. Some of these perforations are large enough to admit the little finger. The grubs of the wood-eating beetles always provide a path for the escape of the perfect insect out of the wood, before they go into the nymph or chrysalis state. In the same manner does the caterpillar of the locust form an opening quite through the bark, before it forms its cocoon. An inspection of the scene of its labors clearly discovers how everything is done." Professor Peck supposed that the larva

lives in the wood three years or more before it attains its full growth. The moths, which come forth about the middle of July, have thick and robust bodies, broad, and thickly veined wings, two distinct feelers, and antennæ, that are furnished on the under side, in both sexes, with a double set of short teeth, rather longer in the male than in the female. The larva of this insect is said also to prey upon the wood of the black oak (*Quercus tinctoria*). The other insects that attack the common locust-tree, is a species of *Apion*, which inhabits the pods and devours the seeds; and the *Eudamus tityrus*, which feeds upon its foliage, as well as upon that of the *Robinia viscosa*.—*Browne's Trees of America*.

ADVANTAGES OF COOKING FOOD FOR ANIMALS.

It is a matter of great importance that many kinds of food intended for domestic animals should be cooked. For example, that of working horses should be so prepared, or of such a nature, as to allow them to satisfy their hunger quickly, that more hours may be allotted for rest during the time given them from labor. Not being ruminating animals, their oats and corn should be boiled or crushed, in order to avoid loss or waste by swallowing it raw or whole. Equal advantages may be derived by cooking grain and roots which are to be fed to cattle, swine, and sheep. To those who have not already the conveniences for crushing and boiling the food for their animals, we take pleasure in recommending the following implements for these purposes:—



MOTT'S BOILER.—FIG. 82.

1st. Sinclair's Corn and Cob Crusher, a cut and description of which appeared in our fourth volume, page 92. Price \$30.

2d. Pitt's Corn and Cob Crusher, which is a new invention, admirably adapted for grinding corn alone, or with the cob. Price of this complete, \$45.

3d. The Hand or Horse-power Mill, made of burr-stone, suitable for flouring wheat and grinding all sorts of threshed or shelled grain. The prices of these vary according to the diameter of the mill-stones, say from \$30 to \$125.

4th. Cast-iron Hand-mill, suitable for grinding all kinds of grain. Price \$7.

Mott's Boiler, Fig. 82. This consists of a common box-stove, with a boiler set over it with two bottoms, which prevent the meal burning in the process of boiling. It will be seen from the cut that this boiler is formed in the simplest possible manner, and may be attended by a child. The dimensions vary from 15 to 60 gallons; the price from \$12 to \$40.

EXPERIMENTS WITH GUANO.

I HAVE used Ichaboe guano, Shakspeare's cargo, on my meadow lands, and also on the following crops, wheat, rye, oats, barley, potatoes, Indian corn, rutabaga, common turnips, and sugar beets, all of which have done well, except the corn and rye. Corn planted in drills, a superabundance of stalk, corn light; this I attribute wholly to planting too close. Rye not well filled, but abundance of straw. Wheat, barley, and oats, not yet threshed, except a few bushels of the former, which have been sold at \$1.37½ per bushel, for seed wheat, and more wanted for the same purpose; the yield will probably be over 30 bushels to the acre. On my meadow lands I used 200 lbs. guano and 200 lbs. of gypsum, which increased the quantity of hay per acre 2,360 lbs., viz.: where no guano was used, cut 1,800 lbs., and where it was used, cut 4,160 lbs. I should recommend 300 lbs. guano and 300 lbs. gypsum, as a top-dressing, to be applied immediately after the frost leaves the ground, and just previous to a rain. On my wheat and rye I used 700 lbs. guano to the acre, 300 lbs. before sowing, 200 lbs. after it was up two inches, and 200 lbs. in the spring, with an equal quantity of gypsum each time. On other crops used 400 lbs. All my meadow lands which have been top-dressed appear like new meadows. The field where I took off my wheat and rye, the grass is very thick, and 18 inches high.

For oats or barley I consider 224 lbs. to the acre quite sufficient. E. K. COLLINS.

Mamaroneck, Oct. 2d, 1846.

PLOWING IN GREEN CROPS.—Spending a short time in New York a few days since, I was invited by Mr. J. W. Satterthwait to look at a field recently sown with wheat, in which he had turned under a very heavy crop of green corn that had been sown broadcast with the Eagle plow, No. 25. The operation was performed first by rolling the corn flat on the surface of the ground, and then completely covering it with the plow, after which the wheat was sown and harrowed in the usual way. Mr. S. has promised to let me know the result, when the wheat is harvested, which, if favorable, shall be sent to you for publication. A TRAVELLER

WESTPHALIA PLAN OF SMOKING HAMS.—A room in a garret; fire in the cellar; smoke gathered in a tunnel and led to the smoke-rooms by a small pipe; by the time it gets there all the heaviest part of the pyroligneous acid has condensed, and the smoke has become cool. Nothing touches the ham but a pure, light cool smoke, which passes off by a number of small apertures, about as fast as it is applied.

REVIEW OF THE AUGUST NO. OF THE AGRICULTURIST.

THE most reasonable way for you and the readers of the Agriculturist to account for my not reviewing your three preceding Nos. is, to believe your Reviewer to be like a skilful physician, who awaits the operation of an experimental dose of medicine, before repeating it. But some, who presume to know "who the author of Junius is," will tell you, that I have been absent "in the Mexican war;" others, that I have had the "copper fever," and hence have been on a trip to Lake Superior. But, I say, that I shall say nothing, except in the way of some few short comments upon your August No.

Do not mix your Potatoes—Let me advise cultivators not to grow but one kind, except perhaps a few very early ones in the garden. I cannot see the advantage of growing all sorts, since no sort are exempt from the wide-spread disease. I have just received a letter from Indiana, which says the rot has already appeared among them, and in places never before affected.

Drying Pears.—By the French method this is too slow an operation for Yankee go-aheadativeness. If dried in a well constructed drying kiln, at an expense so small that it can hardly be counted, they are far superior to dried apples for every-day use. They need not be peeled, and, if small, only cut in halves.

Drying Cabbage Leaves, noticed in the Farmers' Club of this city, makes my Dutch blood boil, as an innovation upon the rights and privileges of sour-kraut. I would sooner die of scurvy than live upon dried cabbage leaves. Pray what is the advantage of "dried cabbage leaves" over that of sour-kraut? I am sure the latter can be taken to sea, and will keep better than the former. If one of my old shipmates is still living, he could give you the history of some choice jars of it which went round the world with him.

Insects, &c.—The same letter above spoken of, tells me of a new enemy of the wheat crop in the west, that is very destructive, called the "chinch-bug." My correspondent says that the fall wheat is eaten up in places by them in the fall; spring wheat and oats sadly injured, and sometimes destroyed just before getting ripe. Will the Prairie Farmer give us more information upon this part of the grain grower?

Self-Acting Machine for Raising Water.—Is this an improvement upon Montgolfier's water-ram? It does appear to me that if I had a fall of seven feet, affording eight gallons a minute, I could construct a much more effective and cheaper machine than the one described. Then, where is the improvement or advantage of this? There is a water-ram in operation near West Chester, Penn., which did not cost more than two days' work of a common carpenter, or handy man with tools, and it does a better business than the one described by you.

Flax Machine.—The best kind is a good threshing machine to take off the seed, without trying to save the lint. The present price of flax will not warrant much attention to its culture, as cotton has taken its place in a great measure; but the seed always commands a remunerating price.

About Fruit Trees Running out.—The reason why many persons are led to the belief that grafts decay with the original stock, is, because so many grafts are taken from decaying trees, and carry with them the disease of the parent stock. It is also a fact that seedlings are more hardy and long-lived than grafts; but this furnishes no proof that varieties do run out in consequence of being only propagated by grafting. Still, I am a great friend to seedlings, and would recommend every farmer to continue every year to "know the tree by its fruit," and if not good, cut down the top, and insert some choice grafts. We have certainly departed too far from seedling fruit trees, in some places; while, in others, there seems to be no taste for any other kind except those that come "nate-ral," and of a size described by friend Greeley, as "five to the pint."

Culture of the Grape.—Whatever comes from the pen of Nicholas Longworth is sure to be read with interest, and these extracts are particularly so. His experiments appear conclusive to me against the importation of grape-vines. I have no doubt that the cultivation of native varieties can be made more profitable upon hundreds of thousands of acres of our native soil, than any other crop. It is useless to cry out against cultivating grapes for wine, on account of our temperance principles. As well might we cry out against growing corn, because a few wicked men make stinking whiskey of it, which certainly produces more drunkenness than all the grape culture in the world. Something more from Mr. Longworth will add value to your pages.

Dairy Cows.—"Almost ashamed to mention the subject," are you, because you have so often endeavored to persuade us of the truth, which we heed not? I think I have read of one before who denied the truth; but when the cock crowed it waked him up to a sense of his duty. Let me crow and wake you up, not to be ashamed to continue to urge upon the notice of all your readers the great importance of improving the quality of their milch cows. I think the article describing Mr. Baker's cows jumps at conclusions rather too much. Because a cow gives 21½ pounds of milk at one milking, it is not certain that she will give 42½ lbs. each day; nor because Mr. Baker had made 7 or 8,000 lbs. of cheese, is it at all certain that he will make 12 or 13,000 lbs. more. If Mr. Baker, at the close of the season, will give us an exact table of the amount of cheese made—number of cows—how long milked—ages—breed—how kept, &c. &c., it will be very interesting and useful to your readers.

Glass Milk Pans.—These may be most excellent, and "with careful usage last a thousand years;" but, with common usage, such as they would surely meet with upon almost every farm, they will be found to cost more than they come to. "Better let them be," and use really good tin ones.

Disease of Fowls.—This is an article well worth the cost of the volume to every person that even keeps a hen. If any of your readers have passed it over without notice, I beg them to refer back to it, and learn the true cause of much of the disease of fowls.

Sheep Husbandry.—Now, whoever knows Jacob N. Blakeslee as well as I do, will bear witness, that he need not squirm because John Brown treads on some folks' toes. No one will accuse friend Jacob with puffing up a spurious article, because we know that he has a good flock, and his practice shows that he knows how to improve them. But he is quite mistaken in supposing that three-fourths of the lambs will partake of the quality of the fleece of the buck in all cases. In my opinion the quality of the fleece of the lamb will depend much upon the *vigor* of the buck at the period of coition. If the buck is in low condition, or old, or sickly, or lacking vigor from any cause, which is often the case from over-working, the fleeces of the progeny will deteriorate from their sire. I am a strong advocate of cross-breeding; yet I must own that I have seen some good flocks that never had enjoyed that advantage; and I very much doubt whether the mere relationship between the male and female is so deleterious, as the breeding together male and female too nearly allied in form, and of a weak constitution.

Gardening, No. 6.—Mr. Talbot says that "cottages and palaces are as much *natural* objects as the nests of birds," which is a new idea, and at first seemed an absurd one; but, upon reflection, I am constrained to coincide with him in opinion. I have heard arguments against improvements in the art and science of agriculture, as "contrary to nature." Now, in fact, this cannot be, for man, in a healthy state of body and mind, is an improving animal; and it is just as much *instinct* for him to build beautiful houses, as it is for birds to build beautiful nests. But there is a difference in men as well as in birds, and there are some turkey buzzards in both classes. The closing line of this article upon gardening, is a text upon which I could write a long sermon. Reader, I pray you look to it, on page 247.

On the same page is another article from Mr. Longworth, upon his favorite theory—practice, rather—a practice, however much it may be scouted by theorists, that has furnished the city of Cincinnati with a greater abundance of delicious strawberries than any other city in the world. And this is owing to the influence of one active mind, and goes to show what influence for good, one good man, and particularly with the aid of a good paper, can effect in agricultural improvement.

The recipe to "make water cool," would be more useful if equally applicable to make the weather cool. We would wrap the whole city in coarse cotton if it would carry off the heat from the inside.

Hints on the Construction of Farm-Houses.—This is one of the most sensible articles of its popular and prolific author. "It seems to us worthy of the attention of every one who would render our country life expressive of its true usefulness and beauty." I think, too, that a farm-house should be "*unmistakably a farm-house*," not only in its exterior, but in its internal arrangement, which I consider of far more consequence than outward appearance; and the point upon which modern houses show the greatest lack of common sense in the builder. I am wedded to the old-fashioned New England farm-house kitchen, and can never forget the big

fire-place and great stone oven; the old settle and long oak table; the great pewter platter and ditto plates; and ditto, too, the old cider mug, while just by the back-door hung

"The old oaken bucket, the moss-covered bucket that hung in the well."

All of which comforts and conveniences of a farm-house kitchen have given way to the little 7 by 9 room and despicable cook-stove; the cut glass and china dishes upon a costly mahogany table; and other *et ceteras* of modern life; none of which show "*the beauty of propriety*" in a farm-house. In fact there is the greatest departure from *propriety* in a very large portion of all modern building, and even in Mr. Downing's figures (59 and 61) in this article, it is not fully visible to my eye. Fig. 61, in particular, lacks elevation from the ground, and both are represented too low in the stories, while the windows have too much of a prison-like appearance. If some person, who is fully capable, would publish a small work of designs, plans, description, and expense of farm buildings, it would become as popular as "Cottage Residences." I don't believe, however, that the talented author of that work is the man for the author of the "New Farm-house Companion." Several designs already published might be embodied. Who shall do it?

About Manures.—I beg your pardon, Judge Beatty, but you have got the cart before the horse in the very first sentence of your valuable article; and if said cart were loaded with stone at the creek in front of your house, you never could back up the hill. You say "there is nothing so important in the art of agriculture as the *restoration* and *preservation* of the *fertility of the soil*." Now what I object to is, that you should give the word "*restoration*" the precedence, when, in fact, if the word "*preservation*" had been kept in view, such a soil as that of "Prospect Hill" would never need the restorative power of manure. And so it is with all the new soil of the wide west. No thought of preserving its natural fertility by a rational system of culture is ever exercised, until at length it falls into the hands of some one who perceives the necessity of resorting to a foreign author, and perhaps imported manures, to learn how to *restore* that which never should have been lost. This is too much like our city system of licensing dens of dissipation, vice, and misery, to *preserve* the morals of our youth in, and then *restoring* them at Blackwell's Island, Sing Sing, or Auburn. Our whole governmental land system is conducted upon the same principle. It holds out inducements for "squatters" to spread over the domain, and skim a little here and there, and then press forward towards the borders of civilisation, leaving behind them their broad tracks of deteriorated soil for some after comer to *restore* to its pristine value, by a system of artificial manuring, that makes such communications as this of your worthy old friend highly valuable.

Butter-making.—A few short answers to a few plain short questions.

1st, 2d, 3d, and 4th.—If you have any other than man, or rather woman power, to drive the churn, let the milk sour till just beginning to grow thick, and then churn.

5th.—Sometimes. But don't use too much.

6th.—Yes, most decidedly, and better.

7th.—65 degrees.

8th.—Not at all important

To make Bacon.—All right, except the direction to "smoke continually in damp weather," and that is all wrong. At such times the hams will be covered with drops of moisture, which, if smoked in, will give the meat an acrid taste. In packing away, first put the ham in a cheap cotton bag, and then charcoal is better than ashes.

New York State Ag. Show.—I have but one comment to make. "The arrangements made by the citizens of Auburn are ample and satisfactory. There is room, and a hearty welcome for all." A similar announcement was made last year. The result proved that strangers, from different portions of our country, walked the streets of Utica in a cold frosty night, for want of shelter, while others paid the most exorbitant tavern bills (*increased 100 per cent. for the occasion*), while the fare could not well be worse. I hope the Auburn welcome will be less frosty—that is all.

Pennock's Grain Planter.—I have seen it work, and it is what it is recommended to be, except that it will not "work so well on hilly and rough land, as smooth." But it would work well on the western prairie land; and in connection with a harvesting machine, which cuts, threshes, winnows, and bags the wheat, what an immense business could be done. The letter heretofore alluded to, from Indiana, informs me that "Mr. Davis, of Au Sable Grove, near Oswego, Illinois," had such a machine in operation upon his farm this season. Will you, my dear Major, give us a detailed account of size, cost, motive power, amount of wheat harvested per day, and if it really works satisfactorily. Don't hesitate; the request comes from an Auld Lang Syne friend, and the information is much needed. We have theory enough of such machines; we want the practice.

Management of Bees.—The remarks of Mr. Miner upon this subject seem well calculated to do good. Since I saw "Bevan on the Honey Bee" recommended by some correspondent of this paper, I have bought one, and I much like the hive described by him. As you appear to be a practical man, neighbor Miner, will you tell us if you have any objection to his hives. But if it is required by nature that bees should have a hive no deeper than wide, How does it happen that they flourish so well in a hollow tree? I once saw while on a journey to what was known twenty years ago only as "the West," a hollow beech tree completely filled twenty feet, while the cavity was not over eight inches diameter. There was evidently no "sparseness of working bees" in this natural hive. When "doctors disagree" so much as they do about the right way to manage bees, it is very difficult for us ignorant mortals to tell which is the right way. I fully agree with you in opinion that many of the patent hives are only patent novelties. Hives, with drawers, like those of Mr. Weeks' patent (from which yours seem to be copied), are very convenient when it is desired to sell the honey in the comb, as the drawers are of a convenient size for retailing.

Ladies' Department.—Knitting.—This is a very pleasant and well-written article; and if the author

is a lady, and single withal, Solus is bound to quit his bachelor's life, and go where he can get his stockings knit *at home*. If he don't I am sure I shall. I agree with (Miss, of course) E. L. that knitting for farmers' boys would be far better than idleness; but I must say, that I do not believe she will live to see such a specimen of universal industry in America. While it is the fashion for farmers' girls to murder music, and daub paper with many colors (calling them pictures), and spin ten times as much street yarn as they knit stocking yarn, and while "*the store*" gives credit, and sells "*so cheap*," she must never expect to see the boys patiently devoting their time to "knitting work."

Boys' Department.—Good Tools.—Most heartily and earnestly do I join in the appeal of "Lert" for good tools for the boys. But while I see men themselves so destitute of judgment, as to continually use the very poorest possible kind of tools, How can I hope to see the boys provided with such as they ought to use? Why, Mr. Editor, I have seen men doing an extensive haying this very month, that don't own a rake nor pitchfork (except a forked stick) in the world. One of my near neighbors has borrowed and kept all this summer, for the use of one of his boys, an old hoe of mine, so poor that I won't use it myself. How can we ever reach such farmers, or effect a reform for the benefit of the boys, while men pursue a course towards themselves so erroneous? However, let us never despair, while we have such good tools as our good pens and types; but keep steadily at work, and be assured that if we cannot induce the present generation of men to furnish good tools for their boys, we may so enlighten the minds of the boys to the wrong practised towards themselves, that, when they become men, they will be sure to furnish their boys with "Good tools"

And here I must close my review of the present month, without being able after jumping over several articles, to reach the "Editor's Table." It is my object to write with a free pen, but not a caviling or caustic one. I wish my comments to be useful, and to induce further communications, and not deter any one through fear of criticism. I am not a critic—a fault finder. I seek information, and am willing to impart what I possess. If I differ in opinion with those I comment upon, I pray them to reply in the same courteous and pleasant mood that I now feel towards them.

May it be for mutual good that I should continue a
REVIEWER.

A READY RULE FOR FARMERS.—We have been frequently asked to explain the difference between the price of wheat per quarter and per barrel. The simple rule is this. Multiply the price per quarter by 7, and divide by 12; the result will give the amount per barrel. Thus 56s. per quarter multiplied by 7 and divided by 12, gives 32s. 8d. per barrel.—*Quebec Gazette.*

TO PREVENT THE RAVAGES OF THE CLOTHES MOTH.—You have nothing to do but to place shallow boxes in your drawers, with a little spirit of turpentine in them; and as the turpentine evaporates and penetrates the cloth, the larvæ will protrude, and be found dead on the surface.

PROPOSED SAFETY LAMP.

Will you permit me the use of your columns, whilst I suggest to some of your manufacturers the policy of manufacturing a lamp suitable to the wants of a cotton planter. I have never seen one, though probably there may be such now in existence. Any one can satisfy himself of the perfect protection from fire, whilst closed, of a lamp made of wire with fine meshes. I believe it was Sir H. Davy who invented the safety lamp for *fire damp* of coal mines, having first proved to his own mind that flame could not ignite without the meshes of a wire. I have tried the same experiment with cotton, and have no fear of throwing a lantern well secured into a pile of cotton with a lighted candle contained therein.

I would advise the lamp to be made very strong, and the bottom heavy, so as not to be easily upset; the wire should be brass or copper, or of some mixed metal that will not rust, and the door be fastened by some strong mode. I presume a lantern about 6 inches square and 10 high could be made from \$1 to \$2, thus costing no more than the glass ones; and by being made strong, would be more safe, less liable to be broken, and would last much longer.

M. W. P.

Edwards' Dépôt, Miss., October, 1846.

THE COTTON CROP.

From the tenor of our correspondence, and information obtained from merchants here, who are in daily intercourse with every section of the cotton-growing region, we judge many planters are likely to fall into, if numbers do not already labor under error, with regard to the probable extent of the incoming crop; and as ignorance on the subject will cause disappointment and dissatisfaction with any sale the merchant may be able to effect, and as it is important that those who produce should be correctly informed, we present you with such statistics and estimates, as will, in our judgment, lead to a more correct opinion than many now entertain. We will not enter into any reasoning, or submit any detailed evidence to substantiate our estimates. The details of our estimate will doubtless not accord with the opinion of some, but the aggregate will, we are confident, approximate to the true result.

The following comparative table kept by the New Orleans Price Current, exhibits the receipts of cotton at all the ports during the past season, ending 31st of August. We give this for the purpose of showing the extent of the late and preceding crop, and the relative increase and decrease at the different ports.

Ports.	Receipts in 1845 and '46.	Receipts in 1844 and '45.	Increase-	Decrease.
New Orleans,...	1,041,393	954,235	87,108	
Mobile,.....	421,966	517,196		95,230
Savannah,.....	189,076	305,016		115,940
Charleston,.....	251,405	426,361		174,956
Florida,.....	139,755	187,769		48,004
Virginia,.....	15,700	25,200		12,299
North Carolina,.....	9,617	12,416		
Other Ports,.....	21,732			
	2,090,644	2,428,243		446,429
		2,090,644		
	Decrease,	337,599		

It will be perceived the increase at this port was 87,000 bales, or about one-twelfth of a full crop, and the decrease at Mobile, Savannah, Charleston, Florida, Virginia, and North Carolina, was 446,429 bales, or about five-sixteenths of a full crop.

From reliable sources of information, we estimate a full average product.

Louisiana to be	- -	365,000 bales.
Mississippi,	- - -	470,000 "
Tennessee,	- - -	65,000 "
North Alabama,	- - -	120,000 "
Arkansas,	- - -	20,000 "

Total, 1,040,000 bales,

which is about the amount received at this port during a good crop year.

We estimate then, in view of the lateness of the crop, destruction by worms and caterpillars, and the above and other data, the production of the United States, in round numbers, as follows:—

Production of Louisiana.....	200,000 bales,	Crop
" " Mississippi.....	340,000 "	"
" " Tennessee.....	50,000 "	"
" " North Alabama.....	90,000 "	"
" " Arkansas.....	12,000 "	"
Receipts of New Orleans.....	602,000 bales.	
" " Mobile.....	380,000 "	
" " Savannah.....	190,000 "	
" " Charleston.....	290,000 "	
" " Florida.....	150,000 "	
" " Va. and N. Carolina.....	20,000 "	
" " Texas.....	20,000 "	

Total of United States, 1,742,000 ba.es.

The supply of cotton for 1846 and '47 may be fairly stated thus:—

Stock on hand.....	700,000 bales.
Crop of the United States.....	1,742,000 "
" Egypt, Brazil, India, &c.....	450,000 "

Total supply, 2,892,000 "

The consumption in Great Britain for six months in 1845, when prices were very low, was 830,266 bales. For the same period in 1846, when prices were much higher than in 1845, the consumption was 775,509 bales, showing a reduction in consumption of 54,757 bales, as the result between periods of high and low prices. The consumption of the United States during the past year was 422,597 bales.

We may then fairly state the consumption for 1846 and '47, thus:—

Great Britain.....	1,550,000 bales.
France, Spain, Continent of Europe, and China.....	800,000 "
North and South America, and West Indies	500,000 "

Total Consumption, 2,850,000 bales.

Supply as above, 2,892,000 "

Excess of supply, 42,000 bales.

Our opinion regarding prices is, that they cannot be forced so high as many anticipate, and as the nature of the case would seem to warrant, from one cause alone, not enumerating others, and that is—cotton is shipped, as a general thing, too much encumbered with bills and cash advances, which tends to force it on the market, and sold at any price buyers may choose to offer, by which means the planter loses his legitimate control.

We quote cotton to-day as follows, and remark that the demand is brisk, and factors ready sellers,

viz.: Ordinary, 8½ a 8½; Middling, 8½ a 9; Good middling, 9 a 9½; Middling fair, 9½ a 9½; Fair, 9½ a 10; Good fair, 10½ a 11; and Fine, 11½ a 12½ cts. These prices will, we think, prevail for some time, and will approximate the average of the season, unless the crop should be much less than our figures indicate. J. A. RUFF & Co.

New Orleans, Oct. 1st, 1846.

We place the above valuable estimate of the cotton crop before our readers, as a present guide and future reference. We will add, however, for ourselves, that the weather, since the date of Messrs. Ruff & Co.'s letter, has generally been favorable for the cotton plant, and increased receipts are anticipated. Judging from more recent advices from different parts of the South now before us, we are of opinion that the present crop will not fall short of 1,900,000, and may go up to 2,100,000. As an evidence of this, cotton (at the time we are writing this article, Oct. 19th) is dull in the market, with a slight downward tendency in New York. We may have advices of an advance by the Liverpool steamer, hourly expected, which of course will cause a corresponding advance on this side of the water.

AMERICAN WINE.

AMONG the valuable contributions to the late Fair of the American Institute, were fine samples of wine from Mr. N. Longworth, of Cincinnati, and a few from other sections of the Union. These specimens were superior to any before sent for exhibition, showing a decided improvement in this branch of husbandry. Two samples of pure wine from Ohio were made from the Catawba grape, and possessed a good body and an excellent flavor, nearly resembling, but much surpassing the dry imported Hock. Another from a native grape, had a fine body, and a peculiar flavor, which use would undoubtedly soon render a favorite. A specimen of pure sweet, or lady's wine, with a small quantity of sugar added to the must, possessed a richness and delicacy of flavor similar to the Malmsey, but more delicious, having the taste of a rich, fresh grape. Two other samples, one from a native grape of Alabama, and another from our own State, showed a body and flavor which gives every promise that the subject needs only to be carefully studied and pursued, to reach a point in production when we can soon dispense with the importation of all foreign wine, excepting some peculiar varieties.

American enterprise has not fully considered the peculiar circumstances of soil, manuring, cultivation, &c., which affect the quality of wine. One side of a hill will frequently yield an article totally different in quality from an opposite side, and the character varies with almost every field where the grape is produced. Generally, the best wine is made from grapes raised without manures, or such as are peculiarly mild in their character, and impart no flavor to the fruit. One of the best vineyards of France was seriously deteriorated for years by a dressing with fresh animal or putrescent manures. Some of the most delicate wines are made from grapes manured only from the trimmings of their

own vines. The great difficulty generally with American wine is the deficiency of body and richness in the fruit, which renders it necessary to add sugar when this deficiency exists. This is always done even with the best wines abroad, when a cold or wet season impairs the accustomed richness of the fruit. We believe our fruits may be much improved, especially for the purpose of wine, by planting seeds from the best foreign varieties. Out of numerous specimens thus obtained, some would doubtless be found combining great richness and sufficient hardness to endure our climate. The same care used in the cultivation of the vine, we may be led to expect will result in equal success with the cultivation of the peach and other fruits, which are natives of hot climates, but of which continued careful and scientific propagation has succeeded in producing the choicest kinds in profusion, and hardy enough for our severe climate.

Choice kinds of beverage are also made from other fruits. The pear yields *perry*, from which the most delicious champagne is made, with the addition of a little sugar. The red and white currant yields a good wine when properly treated with the addition of sugar. The quince, when grated with water, and sugar added, undergoes a fermentation, which, if arrested at the proper period by a small addition of brandy, yields an excellent wine. The best cider, with the addition of bruised or cut raisins, will undergo a fermentation, and if properly treated, subsequently yields a wine of excellent flavor and quality. The introduction of some or all of these may be made for our own use with great advantage; and they are certainly far more desirable than the drugged, pernicious stuff which is too often, we may almost say generally, imported for the use of the sick.

THE POTATO DISEASE.

AT a late meeting of the British Association, Mr. Hogan read a communication which had appeared in a continental journal, in which it was recommended that the potato plant should be propagated by seed, as the best means of guarding against the disease.

Dr. Lankaster said, that the number of facts brought forward by Mr. Hogan to substantiate his plan of remedying the potato disease, were quite insufficient. Unless this plan had been extensively adopted, and found to be extensively successful, it would be folly to proceed on it, with the amount of evidence that could be brought against it. With regard to the causes of the disease, he said that there had not been one theory borne out by evidence that would lead to its being adopted by a man of science. That it depended on atmospheric changes was assumed, and there was no proof of it. There was only the coincidence of certain kinds of weather and the disease. That it arose from debility in the potato plant, was also an assumption. No debility had been proved to exist. He thought it right that it should go forth to the world, that the only conclusion yet arrived at was negative, and that the more they investigated the matter, the more evident did it become, that prevailing theories and remedial recommendations were founded on ignorance and assumption.

ENTOMOLOGY.—No. 1.

MUCH has been said and written upon the various modes of destroying insects injurious to vegetation, and of counteracting in a measure their injurious effects. Were we to enumerate all that have been recommended by various writers on agriculture and gardening, it would surely be a matter of astonishment that the races of injurious insects had not long ago been exterminated, *not* that they should appear in such undue proportion as almost to baffle our exertions to destroy them. It must surely be confessed that in no one department, either of agriculture or gardening, is there such a lamentable deficiency as in this. The reasons for it will be evident, when it is remembered, that in order to check or counteract the operations of these numerous classes of depredators with any success, a knowledge of the peculiar habits and economy of each species is first to be acquired; without this, little can be done of any account, and even the remedies that are applied are used at random. It may be said, and perhaps with some truth, that this subject belongs to the naturalist, and that the agriculturist and gardener should look to him for information, and for effective remedies. The naturalist studies out and explains the animal economy, but it remains for those most interested, those who daily see and feel their effects, to apply remedies which their previous knowledge, obtained from the naturalist, will enable them to do. The agriculturist should devote a portion of his leisure moments in acquiring a perfect knowledge of the general forms which belong to insects, the changes they undergo, and of the primary divisions into which they have been formed by modern naturalists. He should watch their progress, note the manner of their feeding, mark the time they pass in their larva and pupa states, and the period of their becoming perfect insects. He should learn to distinguish between *beneficial* insects whose increase should be promoted, and *injurious* insects whose depredations should be arrested.

In some future communication I may give to your readers, if desirable, a description of the different operations which, in a general way, may be directed to the removal of insects; but, in this, I propose to give a general view of the changes which insects pass through, from the egg to the perfect state; the different appearances which the various tribes assume, before they reach their final development; and the several orders or divisions under which they are classed by modern naturalists.

Insects are distinguished from vertebrated animals by being destitute of a back-bone, and furnished with more than two feet; and from worms, by possessing feet. Most insects are furnished with six feet, but some few have a greater number, as the centipede, wood-louse, &c.

The generality of insects are produced from eggs; some are hatched within the body, and the young are produced in a living state; while most others are hatched from eggs deposited in some secure place, either above or below the surface of the earth. The period required for these eggs to hatch is very variable; in some species this process takes place in a few days, while, with others, it is not accomplished until the following year.

Of the Larva or Caterpillar.—This, properly

speaking, is the first state or stage in the life of an insect. The forms which distinguish the different tribes are numerous and varied; but none are provided with wings. They are known in common parlance by the names of *grub*, *caterpillar*, *maggot*, or *wire-worm*. All insects in this state feed voraciously, and consequently at this period of their lives they are the most destructive to vegetation. They do not feed on all plants alike; some confine themselves to one particular species, without which they die; others eat the leaves of two or three plants only; while some few are general feeders, attacking almost every kind of plants without discrimination. Hence it is that the larvæ of insects found in flower gardens, are different from those of the fields, kitchen garden, or orchard. The smaller species are generally the most injurious, as they make use of many curious devices to escape observation; some penetrate the heart of the young shoot, or eat their way into the bud; many conceal themselves with great skill, by rolling up the leaves in which they have taken up their residence; and others, again, spin themselves a silken case, where they live in security.

Of the Pupa or Chrysalis.—This is the second state, and here they are not to be dreaded, as in general the pupæ are torpid, inactive, and incapable of receiving nourishment. When the larva has attained its growth, it retires either into the earth, or to some secure situation, where the change to the chrysalis state is effected in a few hours, or at most, a few days. The pupæ are as various in their forms and situations as the larvæ. Those of the beetle tribe are found in the earth, or in other substances; they have usually the first rudiments of feet, and of other parts, which become fully developed only in the perfect state. The pupæ of butterflies are entirely naked; and are either suspended by the tail, or attached to trees, walls, &c., by a strong thread. The duration of the chrysalis varies according to the species; and there are many insects which undergo so trifling a change, that it is scarcely perceptible.

Of the Imago or Winged Form.—This is the third and last stage in the life of an insect, and the one in which the organs are fully developed, and when it becomes a perfect being, exhibiting those characters which point out its station in nature. The habits and economy of perfect insects, no less than their external appearance, are, in most cases, totally different from those which belong to the previous stages of their existence. The caterpillar, furnished with strong jaws for devouring foliage, is changed into an insect, without any organs for mastication, and which lives only by sucking the nectar of flowers. The duration of this state of the insect is also variable. Most are probably annual, coming from the egg and passing through all their changes within the year. Some, however, as some of the beetle tribe, are long-lived. Moths are biennial, passing the winter in the chrysalis state under ground. Butterflies are mostly annual; although some few survive the winter, and appear early in the spring. The perfect insect of some species exists but a few hours, and seems born only to provide for a continuation of the species; while in the lower state it enjoys an aquatic existence of two or three years.

L. T. T.

Ladies' Department.

HINTS TO HOUSEKEEPERS.

Old Lady's Diary, June 20th.—Having at length finished my preparations, given my last directions to my faithful Betsey, and a farewell look at closets and store-room, I determine to begin my journey tomorrow, and as my path will lie through by-roads and farming districts, I hope to gain many useful hints for the future.

21st.—The day has been unusually fine, and the country beautiful beyond description. Wherever the eye rests it is charmed by the busy scene, the hay harvest is in full progress, and every field tells of hopes fulfilled. We have stopped for the night at a good-looking farm-house, claiming on a sign swinging near the door, to be "The Traveller's Rest,"—blessed promise, for a long day's ride, however agreeable, will bring fatigue, and the traveller hails a clean room and comfortable bed as God's own benison, which should be gratefully received; everything in my own room appears comfortable, and invites repose; but from sundry indications around the house, such as patches of chicken feathers that have been carelessly thrown out after the chickens had been picked, a pile of old shavings where a dog and some sheep have been reposing, and also two or three pigs running rather too near the house for my liking, creating suspicions that those daring and troublesome domestic familiars—yclept fleas, may, and will, intrude in the house, which otherwise appears a pattern of domestic comfort and cleanliness.

22d.—Morning has dawned at length; my suspicions were, alas, too true, and I have been in the power of the tormentors all night. *Traveller's Rest!* it can only be so to an armadillo or rhinoceros. What the house should be called I leave travellers to decide. I will amuse myself until breakfast time by writing the history of my tormentors, and give it as a hint to my kind entertainers, who, I have no doubt, err only through ignorance.

The flea (*Pulex irritans*), in its perfect state, is too well known to need much comment; their eagerness for blood and their powerful muscular activity, enable them to leap to an amazing distance, while their sharp lancet-like tongue renders them a dread and torment to all within their reach. The female flea deposits from ten to a dozen eggs, of a rounded form and white color; she places them in obscure places, such as cracks in the floor, shavings, sawdust, or hairs of rugs where dogs are accustomed to lie. From these eggs are hatched long worm-like grubs, destitute of feet, with thirteen distinct segments; the last furnished with two hooks. These larvæ are very active, twisting about in all directions, and feeding upon the fleshy particles of feathers, congealed blood, scraps of raw meat left by the dogs near their kennels, and some say, the blood of animals, but this is doubtful, as they are not found on them. In about twelve days they are fully grown, and ready to enclose themselves in a small cocoon of silk, often covered with dust, and attached to adjoining substances, and should the weather be hot, they pass through the change without the silk cover. The eggs that are not hatched until the end of summer, continue in the

worm state all winter. The period of the pupa state varies from eleven to sixteen days. Cleanliness, therefore, both in doors and out is the only remedy for this domestic torment.

My hostess has received the information most kindly. The good man was called in, and has promised to lend his aid, and as soon as the hurry of the farm work is over, the yard is to be well scraped, and the litter to be burned, that the fleas, young and old, may be effectually destroyed; the dog-kennel is to be removed to a greater distance, and a fence made to keep the sheep at a respectful distance from the house. I was then taken into the household councils, and received, in return, useful hints and valuable recipes which I mean to put in practice on my return; the cream cheese was particularly good, and as it is the most economical and easiest recipe I have ever met with, I copy it here. To a quart of sour milk curd, drained to the consistence of soft butter, add a quart of thick rich cream; beat them well together until they are thoroughly mixed, then add a table-spoonful of fine salt; fold a napkin in four folds, and lay it in a large soup plate, into which pour the cream, then fold another napkin and lay it on the top—the mixture will make three or four. Set the plates in a cool place for twenty-four hours; change the napkins and plates every morning for four or five days, when the cheese will be fit for use.

Returning from my visit to the spring-house, I was attracted by a nice intelligent looking girl busily employed mending gum elastic shoes; she was filling up a leisure hour, and preparing for her early walks to the spring-house; her directions are too valuable to be lost. Cut some scraps of gum elastic very fine, and put them into a wide-mouthed vial, on which pour enough oil of sassafras to cover the gum, then stop it tight and leave it until the gum is dissolved, which it will be in two or three days if the mixture is stirred frequently. Wash the gum shoe quite clean, inside and out, and dry it thoroughly, then smear the edges of the slit and the inside of the shoe near it, with the dissolved gum; have a patch of thin gum elastic a little larger than the slit, prepared in the same manner, and place it over the hole on the inside of the shoe, and press it firmly down, placing a weight in the shoe for three or four hours, when the patch will adhere firmly to the shoe.

I then took my leave, promising to pay them a visit next year, provided they get rid of the fleas.

GOD REWARDS VIRTUE AND MAN KNOWLEDGE.—Miss M. E. H., of Poughkeepsie, in leaving the Albany Female Institute, received a gold medal upon which was inscribed the following beautiful and appropriate motto:—

Dieu récompense la vertu et les hommes savoir.

A READY MODE OF REMOVING SPERM, TALLOW, OR OIL FROM CLOTH.—Hold the cloth or garment as near as possible to the fire without burning, and the sperm or oil will immediately evaporate away. If a fire is not at hand, light a small roll of paper and hold it for half a minute or so, close to, and directly over, the oil intended to be removed, and the substance in like manner disappears.

FOREIGN AGRICULTURAL NEWS.

By the arrival of the steamer *Caledonia*, we are in receipt of our foreign journals up to October 4th.

MARKETS.—*Ashes* were brisk of sale at an advance of 1s. 6d. per cwt., and a prospect of still higher prices. *Cotton* a shade higher, with large sales. The stock on hand at Liverpool on the 1st of October, was 655,000 bales, against 957,000 same period last year. *Beef*, *Pork*, and *Lard*, no change. *Cheese*, a limited supply, and much wanted. *Butter* of a choice quality the same. *Hemp* scarce at an increased price. *Flour* an advance of 3s. per barrel. *Indian Corn* an advance. *Naval Stores* in good demand, with an upward tendency. *Tar* scarce. *Rice*, large sales. *Tallow* very scarce, and an improvement of 1s. 6d. per cwt. *Tobacco* in fair request. *Wool* firm, at an advance.

Money remains unchanged. Rate of discount 3 per cent.

Crops.—The spread of the potato disease has been signally arrested, owing to the uncommonly fine autumnal weather. Many more will be saved than was anticipated. Turnips prove a great crop, and will almost entirely supply the place of potatoes for feeding cattle. The latter math of grass and clover is also very abundant. With the exception of last year, the old stock of wheat on hand is larger than it ever has been since the autumn of 1837. The present wheat crop of England is an average one. Taking all these things into consideration, the American merchant should be very cautious about making speculations in grain.

Imports of American Flour and Indian Corn into England.—There were imported into Liverpool this year from America, 877,659 barrels of flour, and from Canada, 246,276, in all, 1,123,935 barrels. The increase of Indian corn is remarkable. In 1845 the import was 37,000 quarters—in 1846 192,000 quarters. The stock at present in Liverpool, is 340,000 barrels of flour, free and in bond, and about 200,000 quarters of wheat, free and in bond. The other grain may be estimated at 100,000 quarters. Thus we perceive what a trade the corn trade in Liverpool is likely to be.

Free Importation of Grain into Frankfort.—The senate of the free city, Frankfort, has just published a proclamation allowing the importation of corn duty free, into the territory of the republic.

Rise of Bread.—On Monday, the full-priced bakers in the metropolis advanced the price of the 4lb. loaf to 8½d., an advance of one halfpenny.

Produce of a Bushel of Wheat and other Grain in Scotland.—The following shows the average produce of a bushel of wheat weighing 60 pounds, manufactured at the water of Leith Mills:—25½ lbs. of fine flour; 22½ do. of seconds; 1 do. of pollard; 10½ do. of bran—loss 1½ lbs.

A Table of the quantity of Flour and Bread from Grain.

	Weight per Bushel in lbs.	Weight of Flour in lbs.	Weight of Bread in lbs.
Wheat,.....	60	48	64
Barley,.....	48	37½	50
Rye,.....	54	42	56
Oats,.....	40	22½	30
Peas and Beans..	60	51	68

—*Gardener's Chronicle.*

A Leaf from Burritt's Journal.—Elihu Burritt, the learned blacksmith, who is now engaged in making a pedestrian tour in various parts of Europe, is giving the result of his observations in the "Christian Citizen," from which we make the following extracts:—

I have just got out "An Olive Leaf, from the Housewives of America to the Housewives of Great Britain

and Ireland, or Recipes for making Various Articles of Food, of Indian Corn Meal," containing all the recipes I received before leaving home from our kind female friends in different parts of the Union—heaven bless them! I have had 2,000 of these Olive Leaves struck off, and intend, in the first place, to send a copy to every newspaper in the realm. I shall have a thousand, all of which I shall put into the hands of those I meet on the road. I have resolved to make it a condition upon which only I consent to be any man's guest, that his wife shall serve up a johnny-cake for breakfast, or an Indian pudding for dinner. I was invited yesterday to a tea party which comes off to-night, where about 30 persons are to be present. I accepted the invitation with the johnny-cake clause, which was readily agreed to by all parties. So tonight the virtues of corn meal will be tested by some of the best livers in Birmingham.

Monday, July 20th.—Wrote like a steam engine till noon, to clear from my hands a peck of letters which had accumulated in the course of a day or two, under the auspices of penny postage. After dinner I mounted my staff, and knapsack, to open my pedestrian campaign with an afternoon's walk towards Worcester, which lies twenty-five miles south of Birmingham. Good Joseph Sturge accompanied me a short distance, then bidding me God speed in all the benevolence of his great heart, left me, like Bunyan's pilgrim, to go on my way rejoicing. In a few minutes I had reached the summit of an eminence, upon which Edgebaston Hall stands half hidden and half revealed in the solemn shade of its "ancestral oaks." Descending this, Birmingham, with all its towering factory-chimneys, disappeared, and I found myself surrounded by the beauty and magnificence of the country scenery of England, in its summer portraiture, and summer music; for the very foliage of the trees, that in some cases over-arched the road, seemed to be vocal with the music of singing birds, of the merriest mood. The little things—they must have been small, else I should have seen some of them—owed nature and art all the melody of their throats for such a beautiful world to sing in. In these lovely groves and hedges, and along the green borders of the meadow-brooks, they were out of the reach of the "villainous saltpetre," and of truant schoolboys, affected with the mania of speculation in speckled eggs. So the wee, twittering songsters may sing right on, without a semiquaver of apprehension from these sources of trouble and interruption. Haying time is about half over, and the wheat harvest has just commenced, and the reapers are on the road, sickle in hand, to gather in the crops. What with stopping occasionally to talk with the hay-rickers, or walking a little way up the narrow lanes walled with "living green," to see an unique cottage through the meshes of its ivy veil; or with looking through a hole in the hedge, at a herd of sleek, mottled cows feeding or ruminating gracefully in a new-shorn meadow, I was four hours in making eight miles. I reached the "Rose and Crown" about eight o'clock, where I found everything in keeping with the rigid simplicity of an English country inn. The hostess—for whether married or not, she is the most visible and vigorous person about such an establishment—a neat, ruddy Englishwoman, in a few minutes served up tea with accompaniments of romantic frugality. One of these articles is worthy of notice, as it is common to every table which I have seen thus far in this country. It is a *shaving*, not a slice of buttered bread, not much thicker than a shaving which a fore-plane would take at a stroke from a straight-grained board of pine. A hungry man would eat a square-yard of these buttered bread-shavings at a meal without much impairing his appetite for substances less superficial.

Editor's Table.

A BRIEF COMPEND OF AMERICAN AGRICULTURE.—By R. L. Allen. Saxton & Miles. Pp. 437, 12mo. Price \$1. We announced this work as in press, in our August number, and now have the pleasure of adding that it has appeared, and is for sale at most of the book-stores. It is a condensed Encyclopædia of Agriculture. The whole subject of soils, manures, crops, and animals, is treated in as full and comprehensive a manner as the space will permit. The most prominent points are clearly yet succinctly stated, and all is expressed in a style at once concise, and readily comprehended. The author has been a practical farmer and stock-breeder, from boyhood, and consequently understands what he is writing about. He avoids all the fanciful theories of the present day, while he treats of the best practices of husbandry, based upon well authenticated principles, as developed and adopted by the most enlightened modern agriculturists. The work treats fully of Southern as well as Northern agriculture, and will be found equally adapted to any latitude of America. It is emphatically a work for the million, and should be in the hands of every farmer. It is neatly got up, and does the publishers credit.

MANUAL OF ROSES; Comprising the most complete History of the Rose, including every class, and all the most admirable varieties that have appeared in Europe and America; together with ample information on their culture and propagation.—By William Robert Prince, Proprietor of the Linnæan Botanic Garden and Nurseries, at Flushing, L. I. New York: Saxton & Miles. Pp. 262, 12mo. The author remarks in his preface, that "During the last ten years the acquisitions made to the Family of Roses, have been so remarkable for their splendor, fragrance, and other qualities, that the public attention has been awakened to their culture in a degree almost unprecedented in the annals of Floriculture. This general regard has given rise to several publications on the subject, in France, England, Belgium, and America, and it has, at the same time, imparted an increased impetus to the culture of the 'Queen of Flowers.' The most prominent of the publications referred to, is from the pen of Mr. T. Rivers, Jr., of England; and it has been the desire of the writer of the present little volume, to combine in its pages, every item of knowledge that is comprised in that estimable work, and to extract from every other source, whatever additional information was attainable; thus forming a concentration of all the information existing in Europe on this interesting subject, and presenting the *toute ensemble* of European attainment as the starting point for American advancement, adding thereto whatever information was existent here in the present stage of the Rose Culture, and which has been derived more particularly from the labors and experience of his father and self, and some few others." The subject the author has chosen is an interesting one, and as far as we are able to judge, the work will prove useful to amateurs and others engaged in floriculture.

A PRACTICAL TREATISE ON DYEING AND CALICO PRINTING; including the latest Inventions and Improvements; also, a Description of the Origin, Manufacture, Uses, and Chemical Properties of the Various Animal, Vegetable, and Mineral Substances employed in these Arts. With an Appendix, comprising Definitions of Chemical Terms; with Tables of Weights, Measures, Thermometers, Hydrometers, &c. By an experienced dyer, assisted by several scientific gentlemen. With Engravings on steel and wood. New York: Harper & Brothers. Pp. 704. 8vo. \$3.50. The object of this work is to systematize and reduce

the whole theory of dyeing, calico-printing, &c., to the utmost simplicity and accuracy. We have hitherto had no work of a purely practical character in these important arts. In the present production, this is the leading idea of the author—himself many years a practical dyer; and from the vast accumulation of material which he has brought to his aid, it is believed more has been accomplished for the practical purposes of those engaged in these departments of commerce than has ever before been attempted. In addition to a prodigious variety of useful, new, and instructive matter, the work comprises over six hundred original patents, or new inventions, principally of foreign origin, which alone must ever constitute the book, one of singular value and permanent utility.

PORTRAITS OF THE PRESIDENTS.—Philadelphia: C. S. Williams. Large folio. This work is well got up, in lithography, in the form of an Atlas, giving accurate portraits of all the Presidents of the United States, from the commencement of the Government down to the present Administration. For sale by Saxton & Miles, 205 Broadway, N. Y. Price \$2.50.

EUROPEAN AGRICULTURE.—By Henry Colman, from personal observation. We are in receipt of Part VII. of Vol. II. of this work. Draining, plowing, irrigation, rotation of crops, soiling, &c., are the contents, and are well and practically treated.

PICTORIAL HISTORY OF ENGLAND.—We have received No. 9 of this excellent work most beautifully illustrated. Harper & Brothers. Price 25 cents. To be finished in about 40 numbers. It is highly useful and agreeable reading.

THE STATESMEN OF THE COMMONWEALTH; with a treatise on the Popular Progress in English History. By John Forster. Harper & Brothers, 82 Cliff Street. Price 25 cents per number, to be completed in five numbers. This republication is embellished with portraits of distinguished persons figuring in the history, and elucidated with valuable notes by the Rev. J. O. Choules. It is a work of great merit, and particularly commends itself to the American Reader, as it describes a series of events which had no little influence in the early settlement of our country, and its subsequent career. Some of the actors in this history, like Sir Harry Vane, the Younger, were at one time residents, and held official stations in New England, and other American colonies.

THE NEW ENGLAND AGRICULTURAL ALMANAC for 1847.—Published by F. Trowbridge, New Haven, Conn. This is prettily illustrated, and well filled with useful matter to the farmer. We can say the same of the American Cultivator's Almanac, published by C. F. Crossman, Rochester, N. Y.

LECTURES TO WOMEN ON ANATOMY AND PHYSIOLOGY, with an Appendix on Water Cure. By Mary S. Gove. Pp. 301. Price 50 cents. Harper & Brothers, 82 Cliff Street. This work should be carefully read by every woman; for nothing is more true than what the fair authoress asserts, that "whoever shall convince mankind of the necessity and importance of the study of Anatomy and Physiology, and those laws which govern life and health, will do more toward promoting the general good and happiness of our species, than he would if he gave us priceless gems, and gold without measure."

LONG ISLAND HORTICULTURAL SOCIETY SHOW.—This came off on the 17th, 18th, and 19th of September, in Flushing. We understand there was a good display of fruits and flowers. Owing to imperative engagements elsewhere, we were deprived of the pleasure of attending it.

SOMETHING OF A SQUASH.—The Batavia Times has sent a squash, grown in the garden of J. A. Clark, of that village, which measures six feet and six inches in circumference, and weighs 150 1-2 pounds.

List of Premiums,

Awarded at the N. Y. State Fair, Auburn, Sept., 1846.

DURHAM CATTLE.

BULLS.—1st, J. M. Sherwood, Auburn, Symmetry, \$15; 2d, Wm. K. Grinnell, Ledyard, Albion, \$10; 3d, C. S. Button, Newark, Osceola, Diploma.

Two year-old Bulls.—1st, H. N. Cary, Marcy, Oregon, \$10; 2d, J. B. Packer, Saratoga, Tecumseh, Colman's Tour.

Yearling Bulls.—1st, Z. B. Wakeman, Herkimer, Young Meteor, \$10; 2d, A. G. Percy, Lyons, Mayflower, Colman's Tour; 3d, J. W. Bacon, Waterloo, Waterloo, Diploma.

Bull Calves.—1st, Geo. Vail, Troy, Oscar, Col. Tour; 2d, J. W. Bacon, Waterloo, Diploma.

Cows.—1st, Geo. Vail, Troy, Lady Barrington, \$15; 2d, Edw. Wells, Johnstown, Venus, \$10; 3d, J. W. Bacon, Waterloo, Red Lily, Diploma.

Two-year-old Heifers.—1st, H. N. Cary, Marcy, Rose, \$10; 2d, J. M. Sherwood, Lalla Rookh, Col. Tour.

Yearling Heifers.—1st, Z. B. Wakeman, Herkimer, Sylvia, \$10; 2d, Edward Wells, Johnstown, Cleopatra, Col. Tour.

Heifer Calves.—1st, Geo. Vail, Troy, Willie 5th, Col. Tour; 2d, J. W. Bacon, Waterloo, Lady Jane, Diploma.

HEREFORDS.

BULLS.—1st, T. H. Hyatt, Rochester, \$15.

Young Bulls.—1st and 2d, Corning & Sotham, Albany, \$10, and Diploma.

Cows.—1st and 2d, Corning & Sotham, Albany, \$15, and \$10.

Heifers.—T. H. Hyatt, Rochester, \$10; 2d, Edward Wells, Johnstown, Diploma.

DEVONS.

BULLS.—1st, L. F. Allen, Buffalo, \$15; 2d, R. M. Remington, \$10.

Young Bulls.—Geo. A. Mason, Jordan, \$10; 2d, S. M. Brown, Elbridge, Diploma.

Cows.—1st and 2d, H. N. Washbon, Butternuts, \$15, and \$10.

Heifers.—1st, H. N. Washbon, Butternuts, \$10; 2d, L. F. Allen, Buffalo, Diploma.

AYRSHIRES. (None offered.)

CROSS-BREDS.

Cows.—1st (not awarded); 2d, H. N. Washbon, Butternuts, \$10; 3d, J. W. Bacon, Waterloo, Vol. Trans.

Two-year-old Heifers.—1st (not awarded); 2d, Enos T. Throop, Owasco, \$10.

Yearling Heifers.—1st, C. T. Baldwin, Owasco, \$5; 2d, Geo. A. Mason, Jordan, Col. Tour; 3d, S. M. Brown, Elbridge, Vol. Tr.

Heifer Calves.—1st, H. N. Washbon, Butternuts, Col. Tour.

Discretionary premium, John G. Wheeler, Sennett, Vol. Trans.

NATIVES.

Cows.—1st, Ira Hopkins, Auburn, \$15; 2d, Charles W. Brown, Sennett, \$10.

Yearling Heifers.—1st, Geo. A. Mason, Jordan, \$5; 2d, Wm. J. Phelps, Owasco, Col. Tour.

Heifer Calves.—Nath. Lynch, Sennett, Col. Tour.

WORKING OXEN.

Best Ten Yoke.—1st, J. S. Wadsworth, Geneseo, \$20; 2d, J. M. Sherwood, Auburn, \$10; 3d, Sheldon, Fellows, and others, Sennett, Vol. Trans.

Best Single Yoke.—1st, E. Sheldon, Sennett, \$15; 2d, J. S. Wadsworth, Geneseo, \$10; 3d, J. M. Sherwood, Auburn, Vol. Trans.

Three year-old Steers.—Best yoke: 1st, J. Boies, Homer, \$10; 2d, J. S. Wadsworth, Geneseo, \$5; 3d, Wm. Hayden, Mentz, Diploma.

Two-year-old Steers.—1st, E. Sheldon, Sennett, \$10; 2d, J. Boies, Homer, Col. Tour; 3d, Amos Barnes, Sennett, Vol. Tr.

Yearling Steers.—1st, Herod Otis, \$8; 2d, J. Boies, Homer, Col. Tour.

FAT CATTLE.

Best Pair Oxen.—1st and 2d, J. Boies, Homer, \$15 and \$10; 3d, A. Pine, Pittstown, Col. Tour.

Oxen or Steers.—1st, G. T. Oliphant, Mount Morris, \$10; 2d, Henry Willard, Cayuga, \$5.

Cows or Heifers.—1st, 2d, and 3d, J. S. Wadsworth, Geneseo, \$10, \$5, and Vol. Trans.

HORSES—For all work.

Stallions.—1st, E. Fuller, Canandaigua, \$10; 2d, Caleb Jasper, Marcellus, \$5; 3d, Isaac Fairchild, Cortland, Diploma; 4th, Joseph Morrison, Ledyard, Vol. Trans.

Brood Mares.—1st, David A. Monroe, Camillus, \$10; 2d, E. A. Howland, Venice, \$5; 3d, Jos. H. Stanley, Cazenovia, Diploma; 4th, J. Boies, Homer, Vol. Trans.

Discretionary Premiums.—Reuben Tift, Veteran, Black Prince, Vol. Trans.; Cyrus Breed, Oswego, Golden Farmer, Vol. Trans.; Geo. Fordon, Geneva, Perfection, Vol. Trans.

FOR DRAUGHT.

Stallions.—1st, Benj. Pettit, Bridgewater, \$10; 2d, S. F. Sellen, Lansing, \$5; 3d, W. Colquhoun, Cornell, Canada, Diploma.

Mares.—Jos. Mabbet, Skaneateles, \$10; 2d, for a grey mare, owner unknown to the committee, \$5; 3d, B. F. Bonney, Hamilton, Diploma.

ELOOD HORSES.

Stallions.—1st, Edward Long, Cambridge, Sir Henry, \$10; 2d, S. W. Holmes, Chataque co., \$5; 3d, Nelson Little, Lodi, Culpepper, Diploma; 4th, Mr. Ferguson, Oswego, Kentucky Hunter, Vol. Trans.

Discretionary Premiums.—John H. Gardner, Young Emperor, two years old, \$10; Ira McGonegal, Virginia, Diploma.

Mares.—1st, Joel B. Nott, Albany, \$10; 2d, Isaac Fairchild, Cortland, \$5; 3d, G. Howland, Diploma; 4th, J. W. Coatman, Aurelius, Vol. Trans.

Three-year old Stallions.—1st, Wm. R. Grinnell, Champion, \$10; 2d, Henry Tully, Tyre, \$5; 3d, Isaac Fairchild, Cortland county, Diploma; 4th, J. C. Burdick, Truxton, Vol. Trans.

Discretionary Premiums.—James Black, Bath, Matched Colts, Vol. Trans.

Geldings.—1st, A. Merrill, Rome, \$5; 2d, to No. 518, owner unknown to the committee, Vol. Trans.

Matched Horses.—1st, Amos Lewis, Dryden, \$10; 2d, W. A. Dutcher, Milo, Diploma; 3d, Oiney Gould, Gaines, 2 Vols. Trans.

SHEEP—Long-Woolled.

Bucks.—1st, Wm. Van Heusen, Champion, \$8; 2d, W. H. Sotham, Albany, Col. Tour; 3d, L. F. Allen, Buffalo, Diploma.

Ewes.—1st, W. H. Sotham, Albany, \$8; 2d, Lewis Taylor, Skaneateles, Col. Tour; 3d, Wm. Buell, Rochester, Diploma.

Lambs.—L. F. Allen, Buffalo, \$5.

MIDDLE WOOLLED.—South Downs.

Bucks.—1st, Z. B. Wakeman, Herkimer, \$8; 2d and 3d, J. M. Sherwood, Auburn, Col. Tour and Diploma.

Ewes.—1st, J. M. Sherwood, Auburn, \$8; 2d, Z. B. Wakeman, Herkimer, Col. Tour.

Lambs.—Z. B. Wakeman, Herkimer, \$5.

MERINOS AND THEIR GRADES.

Bucks.—1st, Joseph Blakeslee, North Salem, \$8; 2d, J. L. Randall, Col. Tour; 3d, Wm. Howard, Diploma.

Ewes.—1st, J. M. Sherwood, Auburn, \$8; 2d, J. L. Randall, Col. Tour; 3d, Wm. Howard, Diploma.

Lambs.—Reed Burritt, Burdett, \$5.

SAXONS AND THEIR GRADES.

Bucks.—1st, S. B. Crocker, Vernon, \$8; 2d and 3d, S. H. Church, Vernon, Col. Tour, and Diploma.

Ewes.—1st, S. H. Crocker, Vernon, \$8; 2d and 3d, S. B. Crocker, Col. Tour, and Diploma.

FAT SHEEP.

J. W. Collins, E. Bloomfield, \$10.

SWINE.

Boars.—1st, C. R. Nichols, Darien, \$10; 2d, G. V. Sackett, Seneca Falls, Col. Tour; 3d, H. Hubbard, Canandaigua, Diploma; 4th, Geo. Carlisle, Bethany, Diploma.

Sows.—1st, Wm. Howard, Owasco, \$10; 2d, A. Shaw, Scipio, Col. Tour; 3d, E. T. Throop, Owasco, Diploma.

Pigs.—1st, Wm. Howard, Owasco, Col. Tour; 2d, Chester Moses, Skaneateles, Diploma; A. Shaw, Scipio, ditto; C. R. Nichols, Darien, ditto.

POULTRY.

Dorkings.—L. F. Allen, Buffalo, \$3; **Polands.**—Franklin C. Moses, Skaneateles, \$3; **Large Fowls.**—J. F. Osborn, Mentz, \$3;

Ducks.—J. F. Osborn, \$3; **Turkeys.**—M. B. Converse, Mentz, \$3; **Greatest Variety Fowls.**—Sam. R. Osborn, Flemming, \$10.

PLOWS.

1st, Howland Delano, Mottville, Certificate; 2d, J. B. Gaylord, Auburn, Diploma; 3d, David Anthony, Springfield, Vol. Trans.

WAGONS, HARROWS, &c.

O. Barton, Onondaga, Silver Medal.

Best Cultivator.—D. B. Rogers, Seneca Falls, Silver Medal.

Best Fanning Mill.—1st, E. Taylor, Rochester, Certificate (Grant's Patent); 2d, D. Clow, Mentz, Silver Medal; 3d, John Gilbert, Diploma; 4th, Orris Heffron, Poplar Ridge, Vol. Tr.

Best Horse Power.—Richard Montgomery, Onondaga, Silver Medal; 2d, John A. Fitts, Rochester, Diploma; 3d, Buell & Nichols, Cazenovia, Vol. Trans.

Best Corn Stalk Cutter.—1st, J. C. Rich, Monroe, Silver Medal; 2d, C. Burnett, Lyons, Diploma; 3d, George Catchpole, Geneva, Vol. Trans.

Best Threshing Machine and Separator.—1st, John A. Pitts, Rochester, Silver Medal; 2d, E. Hicks, Wyoming, Diploma; 3d, Buell & Nichols, Cazenovia, Vol. Trans.

Drill Barrow or Corn Planter.—A. M. Badger, Rochester, Diploma.

Best Straw Cutter.—1st, E. Lockwood, Norwalk, Conn., Silver Medal; 2d, J. C. Rich, Monroe, Diploma; 3d, J. W. Webb, Ledyard, Vol. Trans.

Best Corn and Cob Crusher.—John A. Pitts, Rochester Certificate.

Horse Rakes.—L. M. Whitman, Pike, Diploma.

Hay and Manure Forks.—Barton & Belden, Rochester, Dip.

Axes.—Barton & Belden, Rochester, Diploma.

Hoes.—R. M. Hine, Throopsville, Diploma.

Greatest Collection of Agricultural Implements.—F. Waters, Chautauque, Silver Medal.

Corn Sheller.—T. D. Burrall, Geneva, Diploma.

BUTTER.

From 5 Cows in 30 days.—1st, E. R. Evans, Marcy, Onondaga co., \$25; 2d, O. C. Crocker, Union, Broome co., \$15.

Best 25 pounds made in June.—1st, Joseph Baker, Otisco, Onondaga co., \$10; 2d, Wm. Otley, Phelps, Ontario, Col. Tour; 3d, Elisha Sheldon, Homer, Cortland, Vol. Trans.

Best 50 pounds made at any time.—1st, Joseph Baker, Otisco, \$15; 2d, O. C. Crocker, Union, Col. Tour; 3d, Abram Adams, Preble, Silver Medal; 4th, Elisha Sheldon, Homer, Diploma; 5th, John G. Wheeler, Sennett, Vol. Trans.

CHEESE.

Best 100 pounds, one year old and over.—1st, No award; 2d, ditto; 3d, Robert Eells, Onondaga co., Silver Medal; 4th, William Otley, Ontario, Dip.; 5th, H. N. Washburn, Otsego, Vol. Tr.

Best less than one year old.—1st, No award; 2d, Robert Eells, Col. Tour; 3d, Wm. Otley, Silver Medal; 4th, Isaac Bucklin, Cayuga co., Diploma; 5th, Anthony Shaw, Scipio, Vol. Trans.

SUGAR.

Best Maple.—1st, Benj. Gauss, Jr., Bloomfield, Ontario, \$10; 2d, Moses Eames, Rutland, Jefferson co., \$5; 3d, Erastus Bigelow, Sangerfield, Diploma; 4th, U. E. Talman, Tully, Onondaga, Vol. Trans.

Corn Stalk.—None offered.

SILKS, &c.

Manufactured.—Clark Avery, Perryville, \$15.

Sewing.—1st, Clark Avery, \$10; 2d, Joseph Belcher, \$5; 3d, David Irish, Diploma; 4th, N. M. Coburn, Vol. Trans.

Reeled.—1st, Joseph Belcher, \$5; 2d, N. M. Coburn, Diploma; 3d, David Irish, Vol. Trans.

Cocoons.—1st, N. M. Coburn, \$10; 2d, Joseph Belcher, Colman's Tour.

DOMESTIC MANUFACTURES.

Woollen Blankets.—1st, Wm. Otley, Phelps, \$5; 2d, F. P. Brown, Elbridge, \$4; 3d, Geo. W. Henry, Martinsburgh, \$3.

Flannels.—1st, Albert L. White, \$5; 2d, Clark Avery, \$4; 3d, Wm. Otley, \$3.

Woollen Cloths.—1st, M. W. Priest, Little Falls, \$5; 2d, O. Kellogg, Skaneateles, \$4; 3d, Ditto, \$3.

Woollen Carpets.—1st, Jonathan Conger, Groton, \$5; 2d, No. 474, Unknown, \$4; 3d, D. C. Monroe, Elbridge, Cayuga co., \$3.

Tow Cloth.—A. Shaw, Scipio, Cayuga county, \$3.

Linen.—1st, A. Pine, Pittstown, \$5; 2d, F. P. Brown, Elbridge, \$4; 3d, E. W. Bateman, Venice, \$3.

Linen Diaper.—1st, A. Pine, Pittstown, \$5; 2d, Margaret Jeffery, Truxton, \$4; 3d, George W. Henry, Martinsburgh, \$3.

Hearth Rugs.—1st, Hotchkiss & Smith, Auburn, \$5; 2d, J. Barber, ditto, \$4; 3d, Miss A. R. Smith, Vernon, \$3.

Double Carpet Coverlets.—1st, Caroline C. Jones, Westmoreland, \$4; 2d, C. R. Nichols, Darien, \$3; 3d, C. Britt, Perryville, \$2; 4th, J. Conger, Groton, Vol. Trans.

Woollen Stockings.—1st, Margaret Jeffery, Truxton, \$2; 2d, Mrs. Greenleaf, Watertown, Vol. Trans.; 3d, David Thomas, Aurora, Diploma.

Wove Woollen Stockings.—Miss L. C. Morris, Auburn, \$2.

Linen Thread.—R. S. Ransom, Perryville, \$2.

Kersey.—1st, C. Britt, Perryville, \$3; 2d, R. S. Ransom, ditto, \$2; 3d, A. Pine, Pittstown, Vol. Trans.

Linen Knit Stockings.—1st, Chester Gridley, Sennett, Cayuga county, \$2; 2d, E. W. Bateman, Venice, Cayuga county, Vol. Trans.; 3d, J. L. Eastman, Lodi, Diploma.

Knit Cotton Stockings.—1st, L. C. Morris, Auburn, \$2; 2d, Ditto, Vol. Trans.; 3d, Ditto, Diploma.

Bed Quilts.—1st, Rebecca Johnson, Syracuse, \$5; L. C. Morris, Auburn, \$3; 3d, B. F. Hawks, Phelps, \$2.

Rag Carpets.—1st, William Ranney, Elbridge, Onondaga, \$3; 2d, George Hawley, Auburn, Cayuga, \$2; 3d, Abram Adams, Preble, Cortland, Vol. Trans.; 4th, Jonathan Paddock, Aurelius, Cayuga, Vol. Trans.

FRUIT. Class I.

Table Apples.—1st, Benjamin Hodge, Buffalo, \$5; 2d, A. Bryant & Son, ditto, \$3; 3d, C. Parvis, Greece, Monroe county, Vol. Trans.

Best twelve Sorts ditto.—J. C. Hastings, Clinton, \$3.

Seedling Apple.—Isaac Hildreth, Geneva, \$3.

Table Pears.—1st, Elwanger & Barry, Rochester, \$3; 2d, Benjamin Hodge, Buffalo, Vol. Trans.

Winter Pears.—Elwanger & Barry, Vol. Trans.

Quinces.—George Underwood, Auburn, Vol. Trans.

Native Grapes.—Edward Thomas, Geneva, Vol. Trans.

Foreign Grapes.—Chester Parsons, Skaneateles, Vol. Trans.

CLASS II.

Best Peaches.—Bissell & Hoaker, Rochester, Vol. Trans.

Plums.—G. F. Pratt, Buffalo, Vol. Trans.

FLOWERS.

Greatest Variety.—1st, James Wilson, Albany, Silver Medal; 2d, I. W. Jackson, Schenectady, Diploma; 3d, Elwanger & Barry, Rochester, Vol. Trans.

Seedling Dahlias.—1st, Edward Thomas, Geneva, Diploma; 2d, Ditto, Diploma.

Best 25 varieties Dahlias.—1st, James Wilson, Albany, Silver Medal; 2d, Elwanger & Barry, Rochester, Diploma; 3d, Isaac W. Jackson, Schenectady, Vol. Trans.

Floral Ornaments.—James Wilson, Albany, Silver Medal.

Boquets.—1st, James Wilson, Albany, Col. Tour; 2d, L. Menard, ditto, Diploma; 3d, Ditto, ditto, Vol. Trans.

Green-House Plants.—1st, Mrs. M. Miller, Auburn, Diploma; 2d, Miss H. C. Moses, Skaneateles, Vol. Trans.

German Astor.—I. W. Jackson, Schenectady, Vol. Trans.

Best 12 Roses.—1st, James Wilson, Albany, Diploma; 2d, Elwanger & Barry, Rochester, Vol. Trans.

FLORAL ORNAMENTS.

Discretionary Premiums.—Mrs. E. T. Troop Martin, Willow Brook, Cayuga county, Diploma; Elihu Tyler, Buffalo, ditto; Elwanger & Barry, Rochester, ditto; Professor Coppock, Horticultural Society, Buffalo, ditto; William Webb, Buffalo, ditto; Benjamin Hodge, rare and beautiful roses, ditto; Henry Morgan, Aurora, ditto.

VEGETABLES.

Water Melons.—H. N. Langworthy, Rochester, Col. Tour.

Musk Melons.—George Cooper, Irondequoit, Monroe county Vol. Trans.

White Carrots.—C. F. Crossman, Rochester, Vol. Trans.

Field Carrots.—Joseph H. Osborn, Mentz, Cayuga county Vol. Trans.

Beets (Long Blood).—C. F. Crossman, Vol. Trans.

White Parsnips.—George Cooper, Vol. Trans.

White Table Turnips.—George Cooper, ditto.

Cabbages.—George Cooper, Vol. Trans.

Tomatoes.—C. F. Crossman, ditto.

Egg Plant.—C. F. Crossman, ditto.

Sweet Potato.—H. G. Dickinson, ditto.

Lima Beans.—Ira Hopkins, Auburn, ditto.

Parsley.—George Cooper, ditto.

Squashes.—H. G. Dickinson, one weighing 80 lbs. Vol. Trans.; Hiram Hubbard, Canandaigua, six from one seed weighed 574 pounds, one of which weighed 146 3-4 pounds, Vol. Trans.

Pumpkins.—C. Moses, Skaneateles, ditto.

Seed Corn.—Chester Gridley, Sennett, Cayuga county, Vol. Trans.; Dr. John Thompson, Ledyard, ditto, ditto; Joseph F. Osborn, Mentz, ditto, ditto.

Mangel Wurtzel.—James Rattle, Sennett, Cayuga co., ditto.

Sugar Beets.—Joseph F. Osborn, Cayuga county, ditto. **Discretionary Premium** for beets, carrots, and millet, Thomas Ogden, Vol. Trans.; Ditto for sweet corn and red peppers, A. Custin, do.

Wheat.—R. Harmon, Wheatland, three varieties Vol. Trans.; Martin Smith, white flint, \$5.

Best Table Potatoes.—1st, C. R. Nichols, Mercers, Genesee county, \$2; 2d, C. F. Crossman, Long Pink Eye, Monroe county, Vol. Trans.; 3d, Joseph F. Osborn, ditto, Cayuga county, ditto.

Seedling Potatoes.—N. S. Smith, Buffalo, Pink Eye, \$5; Ditto, 4 varieties, Colman's Tour.

Teazles.—Richard Abbey, Seneca county, Vol. Tr.

Red Peppers.—Richard Abbey, five boxes, several varieties, Vol. Trans.

BEE-HIVES.

Aaron Colton, Pittsfield, Vermont, \$5; Wm. R. Kelsey, Starkey, Yates county, Vol. Trans.

ON STOVES, &c.

For Cooking.—1st, Jackson & Phelps, Syracuse (Buck, No. 8), for Hotels, Diploma; 2d, D. E. Stafford (Telegraph), Silver Medal; 3d, Anthony Davy & Co., Troy, six sizes (Washington Air-Tight) Diploma.

Parlor Air-Tight.—1st, Atwood, Cole & Crane, Silver Medal; 2d, Wager & Dater, Diploma; 3d, J. S. & M. Peckham, Dip.

Stove Hollow Ware.—Hoag, Schenectady (5 pieces), Vol. Trans.

PAINTINGS AND DRAWINGS.

W. M. Beauchamp, Skaneateles, Diploma; Pencil Drawing by Miss Cox, ditto; Crayon Drawing by Miss Conkling, ditto.

IMPLEMENTS AND MACHINERY.

Reaping Machine.—C. H. McCormick, Rockbridge county Va., \$5.

Stump Machine.—R. H. Hall, Owego, \$10.

Grain Planter and Ash-Sowing Machine.—P. Seymour, East Bloomfield, Ontario county, \$5.
Sowing Machine.—W. H. Jones, Bridgeport, Conn., Diploma.
Flax-Pulling Machine.—H. Hill, Diploma.
Bells.—A. J. Meneely, West Troy, Diploma.
Door Locks and Bell Pulls.—Dana & Price, Utica, \$5.
Rockaway Buggies.—Allen & Carpenter, Groton, Tompkins county, \$5.
Buggy Wagons and Sleighs.—James Gould & Co., Albany, Dip.
Double Acting Force Pump.—1st, Phelps & Messenger, Oneida, \$3; 2d, H. G. Madison, Syracuse, Diploma.
Fire Engine.—Calvin Young (16 years old), Auburn, \$5.
Balance Slide Farm Gate.—1st, H. White, Kirkland, Oneida county, \$3; 2d, S. Benham, Camillus, Onondaga county, Dip.
Portable Bdstead.—James Hazlett, Utica, \$3.
Refrigerator and a Shower Bath.—E. Taylor, Rochester, \$5.
Horse Yoke.—E. H. Danforth, Busti, Chautauque county, \$3.
Leather-Cracing Machine.—S. Wilson, Dansville, Livingston county, \$3.
Imitation Graining.—F. Van Doorn, Rochester, \$3.
Smut Machine.—Wilson & McCulloch, Syracuse, Diploma.
Buckwheat Cleaner.—Daniel Pease, Jr., Diploma.
Mill for Sawing Siding.—Nelson Peck, Lyons, Wayne county, Diploma.
Portable Grist Mill.—J. H. Bristol (Fitzgerald's Patent), Dip.
Hay Scales.—J. F. Keeler, Cazenovia, \$5.
Ox Yoke.—Elton Sheldon, Sennett, Cayuga county, Diploma.
Buggy Wagons and Chariotees.—John W. Bates, Utica, Dip.
Wagon Wheel.—J. S. Royce, Cuylerville, Livingston co., Dip.
Compound Carriage Wheel.—Norman Rude, Onondaga, \$3.
Self-Acting Cheese Press.—W. C. Pratt, Weedsport, Cayuga county, Diploma.
Seraphines.—Upton & Miller, Rochester, Diploma.
Whips.—W. R. Strong, Rochester, Diploma.
Sofa and Card Tables.—Charles Rust & Son, Syracuse, Dip.
Portable Hunting and Fishing Case.—William Gardner, Geneva, Diploma.
Stone Pattern Carving.—J. F. Seymour, Utica, Diploma.
Boot Crimping Machine.—J. H. Ladne, Cato, Cayuga county.
Mustard and Paste Blacking.—D. Murdock & Co., Albany, Diploma.
Saddlery Hardware.—Kasson Fraser, Syracuse, \$3.
Harness and Bridles.—1st, P. Williamson, Skaneateles, Diploma; 2d, F. A. Keeler, Albany, Diploma; 3d, C. H. Wheaton, Homer, Cortland county.
Butter Firkins.—Abram Sherman, Summer Hill, Cay. co. \$2.
Model Steam Engine.—D. D. R. Ormsby, Homer, Cortland co., Diploma.
Card Printing Press.—F. A. Marsh, Diploma.
Hand-Power Planing Machine.—Andrew Parker, Auburn, Dip.
Morticing Machine.—Benjamin H. Otis, Syracuse, Dip.
Revolving Bellows.—Jerome Darling, Adrian, Michigan, Dip.
Drill-Sawing Machine.—Pennock & Pierce, Chester county, Penn., Diploma.
Sculpture in Wood (very interesting), and showing great promise.—J. Fangster, Buffalo, a boy 14 years of age, \$5.
Sash Lock.—James Jones, Rochester, Diploma.

MISCELLANEOUS FANCY ARTICLES.

Shell Work.—Miss L. C. Morris, Auburn, \$3.
Wax Work.—Miss L. C. Morris, Auburn, \$5, and Diploma;
 Miss Mary F. Snow, \$3.
Needlework—Fire Screens.—Della M. Colvin, Syracuse, \$5;
 Lydia S. Russell, \$5.
Ottoman Covers.—Della M. Colvin, \$3; F. E. Thornton, Fleming, \$3; Mrs. N. M. Stephens, Elbridge, \$3, and Diploma.
Table Covers.—Mrs. Geo. W. Patterson, Chautauque county, \$4, and Diploma.
Group of Flowers in Worsted.—Mrs. John Porter, Auburn, \$3.
Lamp Mats.—Mrs. W. G. Pierce, Auburn, \$3; Mrs. Brockway, Brockport, Monroe county, for variety of Worsted work, Dip.
Worsted Rugs.—Mrs. Lucas, Auburn, \$4; Mrs. Roxana Cottle Hurston, Buffalo, \$2, and Diploma; Mrs. Cornelius Walcott, Elbridge (uncut), \$3.
Fancy Chairs.—Mrs. Sarah Harbottle, Auburn, \$1; Mrs. Joseph Sabin, Syracuse, Diploma; Ladies of Utica Female Academy, \$3 and Diploma.
Handkerchiefs, Caps, &c.—Mrs. V. R. Voorhees, Amsterdam, \$3; Miss Abby Allin, Camden, Oneida, \$2; Miss Green (child's dress), Jordan, Cayuga county, \$1.
Fancy Painting and Needlework.—Mrs. Wm A. Dutcher, Milo, \$3, and Diploma.
Embroidered Shawls.—Mrs. Alanson Benson, Skaneateles, \$3; Mrs. John G. Wheeler (Thibet cloth), Sennett, \$3.

FLOWING MATCH.

1st, David Cossit, Onondaga, \$15; 2d, Azariah Letts, Ulysses, Tompkins, \$12; 3d, Henry Willard, Cayuga, \$10; 4th, L. C. Pratt, Salina, Onondaga, Vol. Tr.; 5th, J. B. Gaylord, Auburn, Cayuga, county, Col. Tour.

Notice.—Persons entitled to Cash Premiums, can draw on J. M. D. McIntyre, Esq., Treasurer, Albany, or apply personally; and for Medals, Books, or Diplomas, on Joel B. Nott, Esq., Corresponding Secretary, Albany.

PREMIUMS AWARDED

AT THE

Nineteenth Fair of the American Institute.

NATIVE STOCK.

For the best Native Cow, Whitson Jarvis, Brooklyn, Silver Cup, \$10; Second best, Le Grand Bradley, Hamden, Ct., Silver Medal, \$5.
 Best Native Heifer, Josiah Purdy, Jr., Rye, Westchester co., Silver Medal, \$5.

IMPROVED STOCK.

Best Durham Bull, over 2 years old, Bell & Morris, Westchester county, Silver Cup, \$15.
 Best Devon bull, 2 years old and over, Roswell L. Colt, Paterson, N. J., Silver Cup, \$15.
 Best Ayrshire bull, 2 years old and over, Roswell L. Colt, Silver Cup, \$15.
 Best Durham bull calf, Bell & Morris, Silver Medal, \$5.
 Best Ayrshire bull calf, Roswell L. Colt, Silver Medal, \$5.
 Best Durham cow, John A. Pool, New Brunswick, Silver Cup, \$15.
 Best Devon cow, R. L. Colt, Paterson, Silver Cup, \$15.
 Best Ayrshire cow, Thomas Ellison, New Windsor, Silver Cup, \$15.
 Best Alderney cow, R. L. Colt, Silver Cup, \$15.
 Best Durham heifer, over 1 year, Thomas Addis Emmet, New York, Silver Cup, \$8.
 Best Devon heifer, over 1 year, J. N. Blakeslee, Watertown, Conn., Silver Cup, \$8.
 Best Durham heifer calf (bred by George Vail, Troy), Samuel Allen, New York, Silver Medal, \$5.
 Best bull, over 1 year, Wm. Whitney, Morristown, N. J., Silver Cup, \$8.
 Best Devon bull, over 1 year, R. L. Colt, Silver Cup, \$8.
 Best grade bull, over 2 years old, Lewis G. Morris, Fordham, Silver Cup, \$10.
 Best grade bull, over 1 year old, Jas. Bathgate, Fordham, Silver Cup, \$6.
 Best grade bull calf, James Weeden, Newtown, L. I., Silver Medal, \$5.
 Best grade cow, Charles Bathgate, Westchester county, Silver Cup, \$10.
 Best grade heifer, over 1 year, Lewis G. Morris, Fordham, Silver Cup, \$6.
 Best grade heifer calf, James Bathgate, Fordham, Silv. Med. \$5.

WORKING OXEN.

Best yoke working cattle, Curtis Bacon, Middletown, Ct., Silver Cup, \$15; Second best ditto, John B. Davis, Derby, Ct., Silver Medal, \$5.

FAT CATTLE.

Best pair fat oxen, S. Strong, Milford, Ct., Silver Cup, \$15.
 Fat steer, Joseph F. French, Silver Medal, \$5.

SHEEP.

Merino buck, J. N. Blakeslee, Watertown, Ct., Silver Cup, \$8.
 3 best Merino ewes, J. N. Blakeslee, Silver Cup, \$8.
 Saxon Merino buck, Hiram Whitlock, Watertown, Ct., Silver Cup, \$8.
 Saxon Merino ewes, the same, Silver Cup, \$8.
 Best Leicester buck, Chas. Bathgate, Morrisania, Silv. Cup, \$8.
 3 best Leicester ewes, Benj. Florence, Mamaroneck, N. Y., Silver Cup, \$8.
 3 Best Leicester lambs, Bell & Norris, Morrisania, Silver Medal, \$5.
 Best Southdown buck, R. Bolton, Jr., East Chester, Silver Cup, \$8.
 Best Southdown lambs, R. Bolton, Jr., Silver Cup, \$8.
 Improved Bakewell Sheep, Charles Blackburne, Prospect Hill, \$6.

FARMS.

Gold Medals were awarded to the Farm of Gen. J. Johnson, East Brooklyn, and the Farm of the Corporation of the city of New York, on Blackwell's Island, under the Superintendence of Moses G. Leonard.

Silver Cups were awarded for Farms, to Wm. J. Townsend, Astoria; Samuel B. Townsend, Newtown; David S. Mills, Newtown; and Gouverneur Morris, Morrisania.

AGRICULTURAL IMPLEMENTS.

For the largest exhibition of Agricultural Implements, A. B. Allen, New York, Silver Medal.

AGRICULTURAL PRODUCTIONS.

Native Wine.—For a fine light wine, called Ladies' Wine, N. Longworth, Cincinnati, Ohio, Silver Cup, \$10.

For a sample of Wine, C. A. Peabody, Columbus, Geo., Silver Medal.

For the best Native Grapes, Dr. R. T. Underhill, Croton Point, Silver Medal.

For the Best Foreign Variety of Grapes, R. L. Colt, Paterson, N. J., Silver Medal.

REVIEW OF THE MARKET.

PRICES CURRENT IN NEW YORK, OCTOBER 24, 1846.

ASHES, Pots,.....per 100 lbs.	\$4 50	to	\$4 56
Pearls,.....do.	5 00	"	5 66
BARK ROPE,.....lb.	5	"	7
BARK, Quercitron,.....ton.	26 00	"	26 50
BEANS, White,.....bush.	1 12	"	1 25
BEESWAX, Am. Yellow,.....lb.	26	"	30
BOLT ROPE,.....do.	12	"	13
BONES, ground,.....bush.	40	"	55
BRISTLES, American,.....lb.	25	"	65
BUTTER, Table,.....do.	16	"	25
Shipping,.....do.	9	"	13
CANDLES, Mould, Tallow,.....do.	9	"	11
Sperm,.....do.	25	"	38
Stearic,.....do.	20	"	25
CHEESE,.....do.	5	"	10
COAL, Anthracite,.....2000 lbs.	5 00	"	6 00
CORDAGE, American,.....lb.	11	"	12
COTTON,.....do.	7	"	12
COTTON BAGGING, Amer. hemp,....yard,	13	"	14
Kentucky,.....do.	11	"	12
FEATHERS,.....lb.	25	"	34
FLAX, American,.....do.	7	"	8
FLOUR, Northern and Western,.....bbl.	5 88	"	6 12
Fancy,.....do.	6 00	"	6 50
Southern,.....do.	5 88	"	6 12
Richmond City Mills,.....do.	7 00	"	7 12
Rye,.....do.	4 44	"	4 50
GRAIN—Wheat, Western,.....bush.	1 15	"	1 30
Southern.....do.	1 05	"	1 15
Rye,.....do.	75	"	80
Corn, Northern,.....do.	73	"	75
Southern,.....do.	71	"	72
Barley,.....do.	61	"	63
Oats, Northern,.....do.	34	"	36
Southern,.....do.	30	"	33
GUANO,.....do.	2 00	"	3 00
HAY, in bales,.....100 lbs.	45	"	50
HEMP, Russia, clean,.....ton.	200 00	"	210 00
American, water-rotted,.....do.	105 00	"	185 00
American, dew-rotted,.....do.	75 00	"	125 00
HIDES, Dry Southern,.....do.	7	"	8
HOPS,.....lb.	10	"	15
HORNS,.....100.	1 00	"	7 00
LEAD, pig,.....do.	4 25	"	4 31
Sheet and bar,.....lb.	4	"	5
MEAL, Corn,.....bbl.	3 50	"	3 75
Corn,.....hhd.	15 50	"	16 00
MOLASSES, New Orleans,.....gal.	28	"	32
MUSTARD, American,.....lb.	16	"	31
NAVAL STORES—Tar,.....bbl.	2 00	"	2 25
Pitch,.....do.	1 00	"	1 06
Rosin,.....do.	55	"	65
Turpentine,.....do.	3 50	"	3 56
Spirits Turpentine, Southern,....gal.	46	"	50
OIL, Linseed, American,.....do.	60	"	63
Castor,.....do.	55	"	70
Lard,.....do.	65	"	70
OIL CAKE,.....100 lbs.	1 25	"	1 50
PEAS, Field,.....bush.	1 25	"	1 50
PLASTER OF PARIS,.....ton.	2 25	"	3 00
Ground, in bbls.,.....of 300 lbs.	1 12	"	1 25
PROVISIONS—Beef, Mess,.....bbl.	7 90	"	9 00
Prime,.....do.	6 00	"	6 75
Smoked,.....lb.	6	"	9
Rounds, in pickle,.....do.	4	"	6
Pork, Mess,.....bbl.	9 50	"	12 00
Prime,.....do.	7 88	"	9 25
Lard,.....lb.	7	"	8
Bacon sides, Smoked,.....do.	3	"	4
In pickle,.....do.	3	"	4
Hams, Smoked,.....do.	6	"	10
Pickled,.....do.	4	"	7
Shoulders, Smoked,.....do.	5	"	6
Pickled,.....do.	4	"	5
RICE,.....100 lbs.	3 75	"	4 75
SALT,.....sack,	1 28	"	1 38
Common,.....bush.	20	"	35
SEEDS—Clover,.....lb.	6	"	9
Timothy,.....7 bush.	11 00	"	20 00
Flax, clean,.....do.	10 25	"	11 25
rough,.....do.	9 00	"	9 25
SODA, Ash, cont'g 80 per cent. soda,....lb.	3	"	3
Sulphate Soda, ground,.....do.	1	"	—
SUGAR, New Orleans,.....do.	6	"	8
SUMAC, American,.....ton.	35 00	"	37 50
TALLOW,.....lb.	7	"	8
TOBACCO,.....do.	2	"	7
WHISKEY, American,.....gal.	24	"	26
WOOLS, Saxony,.....lb.	35	"	60
Merino,.....do.	25	"	30
Half blood,.....do.	20	"	25
Common do,.....do.	18	"	20

REMARKS.—On reference to our Price Current it will be seen that Ashes, Cotton, Flour, Wheat, Barley, Oats, Corn, Indian Meal, Hay, Naval Stores, Lard, Provisions, and Tallow, have advanced, the late European advices per Caledonia being in favor of these articles. We almost regret to see such advance, as it may have a tendency to prevent shipments to that extent which would take place if prices were kept lower. The United States grow such large quantities of produce, it is a great object to sell at moderate rates, and thus prevent other nations competing with us in the English market.

Money continues abundant at legal rates, for all private purposes. The Government is somewhat pinched for funds, which may ultimately affect private affairs, unless the people continue very prudent in the conduct of their business. Credits should be avoided as much as possible.

TO CORRESPONDENTS.—Cato, A Young Farmer, Wm. R. Prince, Reviewer, M. W. Phillips, L. T. Talbot, J. H. Beale, E. M. C., and Westchester, are received. The last will be good enough to send us samples of his African maize, as we suspect it is Egyptian millet, such as has long been cultivated here.

ACKNOWLEDGMENTS.—The Northern Galaxy, containing the List of Premiums of the Addison County, Vt., Ag. Society Show and Fair; the same of the Cortland County Ag. Society.

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